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VISIBLE HANDS: INFERRING TRANSLATION STRATEGY

**An Analysis of a Corpus
of Translations Produced at
Canadian National (CN)**

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A Thesis

in the

Humanities Program

Presented in Partial Fulfilment of the Requirements
for the Degree of Doctor of Philosophy at
Concordia University
Montréal, Québec
Canada

December 1998

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ABSTRACT

Visible Hands: Inferring Translation Strategy (An Analysis of a Corpus of Translations Produced at CN)

Sheryl A. Curtis
Concordia University, 1998

Using a series of six internal magazines/newspapers produced by Canadian National, from 1993 to 1994, to communicate company news, information and policies to employees, as well as the translations of those vehicles, this investigation examines the concepts of the translating institution and translation strategy. It develops a systematic approach for inferring translation strategy from a corpus of translations, with an emphasis on observing and documenting, rather than on evaluating translation quality. It argues that the translator is a perfectly visible component in the translation process, having a definite impact on the translation produced, that translation strategy can be inferred from corpus analysis, and that translations reveal a great deal about the environment in which they are produced. It also argues that, for the group of translators studied, the primary translation strategies were to produce translations which were fully grammatical and idiomatic and to produce translations which were superior to the original. Although this study was undertaken as an effort to uncover ways in which to improve the relationship between translators working in large corporate translation departments and the various corporate departments using their services, changes which have occurred in the translation industry over the past five years have given this study a rather more historical import.

ACKNOWLEDGEMENTS

I am grateful to Sherry Simon, Bakr Ibrahim and Don Taddeo for guiding me through the extremely lengthy process which resulted in this thesis. I would also like to thank various members of my family and friends, including René Dugas, Sébastien-Patrick Dugas, Jérémie-Xavier Dugas, Elinor Curtis, Eric Curtis, and Stanley French.

"Do you know languages? What's the French for fiddle-de-dee?"

"Fiddle-de-dee's not English," Alice replied gravely.

"Whoever said it was?" said the Red Queen.

Alice thought she saw a way out of the difficulty, this time.

"If you'll tell me what language 'Fiddle-de-dee' is, I'll tell you the French for it!" she exclaimed triumphantly.

But the Red Queen drew herself up rather stuffily and said, "Queens never make bargains!"

Lewis Carroll

Alice Through the Looking Glass

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INTRODUCTION

As a result of the large number of languages spoken in the world, the constant progress in the fields of transportation and communication, the ease and rapidity of transportation and communication across borders, the constant flow of immigrants to North America, and the penchant of North Americans to travel and do business abroad, contact between people belonging to different linguistic and cultural groups is inevitable and increasing. It is clear that “successful intercultural communication is a matter of highest importance if humanity and society are to survive.” (Samovar & Porter 1972, iii) If we are to negotiate with other cultures and do business successfully with them, we must learn to understand cultural differences.

Canadians do not have to leave home to face the necessity of intercultural communication. One of the main features of North America is its newness. Apart from Native Canadians and French Canadians, few people living in Canada can trace their roots in Canada back more than three or four generations. (Landis & Brislin 1983, 260) Immigration has made Canada multi-ethnic and, consequently, multicultural. For instance, it is estimated that by the year 2001, 15% of Canada's population will be members of a visible minority. (Yuen 1989, 17) However, what is merely an unofficial way of life in countries such as the United States, has been given official status in Canadian by the Canadian *Multiculturalism Act*. In Canada, intercultural communication

also involves communication across two languages. Bilingualism and biculturalism were officially sanctioned with the *Official Languages Act*. This was reinforced by the Canadian Constitution and the *Official Languages Act of 1988*. Support for bilingualism ranges anywhere from the complete hostility of fringe groups such as APEC (Association for the Preservation of English in Canada) to the wholehearted endorsement of the Commissioner of Official Languages (Commissioner of Official Languages 1990, 4).

Intercultural communication is a fact of life in Canada. The two main linguistic groups share the same environment, and contact and communication are inevitable. Nowhere do the two groups come into closer contact than at work for the Federal Government or for any of the various government agencies and Crown corporations which exist. Federal policies oppose discrimination based on language, support the use of both of Canada's official languages by the government and its Crown corporations, and promote the representation of Francophones in the government and Crown corporations. Consequently, Anglophone and Francophone employees come into daily contact at work for the government and both groups are legally entitled to work in the official language of their choice.

Internal organizational communication at Crown corporations in Canada is bilingual as opposed to unilingual. For example, in the case of the Canadian National Railway Company (CN), the company is obliged to communicate with each of its employees in English or French, at the employee's discretion. As a result, all company publications, all memos and other documents from management, all manuals, and other documentation must be provided in both English and French.

Language is essential to intercultural communication and translation is essential for those who cannot speak a language they need to speak. The importance of translation and, consequently, translation quality, is apparent in the Canadian context.

English-French/French-English translation is essential to intercultural communication in Canada and has been a fact in Canada since the Seven Years' War ended in 1763 with the signing of the Peace of Paris. Furthermore, when the Federal Government first passed the *Official Languages Act* in 1969, requiring all government offices and agencies and all Crown corporations to provide all of their services in both official languages (in areas designated as bilingual), and the Government of Québec adopted the *Charter of the French Language* (commonly called *Bill 101*) in 1977, requiring all companies operating in Québec to deal with the public and the government in French and guaranteeing the right of the Francophone majority in Québec to live and work in French, French-English/English-French translation became a political necessity, imposed by law.

Translation is also an economic necessity. First, employees want to work in their mother tongue and customers frequently insist on doing business in their own language. The Federal Government is bilingual. Although the official language of the Government of Québec is French, all laws and most regulations are translated and various social services are provided in English as well as French. Crown corporations such as Canadian National must deal with both their customers and their employees in both official languages. Private corporations such as CP Rail employ translators to cross the barrier in Québec between their predominantly English management and their largely Francophone

blue-collar workforce.¹ These are just two of the many companies which require translation.

Second, as competition increases under free trade and companies continue to cope with an economy which remains difficult, companies will be offering their clients what they want, even linguistically, and will also be seeking out the very best employees, regardless of language and culture. For example, according to Gillian Pritchard (Pritchard 1988, 46), even a bastion of Anglophone ethnocentricity such as Sun Life, which moved out of Québec for purely linguistic reasons, has seen the value of dealing with customers in the language of their choice and has set up a department of employees who speak Chinese and are familiar with Chinese culture to reach out to the large Chinese market in Canada.

In short, Canada is now officially multicultural and bilingual, and discrimination based on language is prohibited. Canadian businesses have had to learn to operate in this very unique context and, as a result, there is a significant demand for translation. Translation has become a multi-million word and multi-million dollar industry: the Federal Government and the Québec Government are the largest public employers; Bell Canada (Bell Canada 1989) lists a total of 364 translation departments, most operating in Ontario, Québec and New Brunswick; and the Ordre des traducteurs et interprètes agréés du Québec (OTIAQ 1997) lists 1,285 certified translators, in addition to 67 certified

¹ It should be noted that the translation situation at Canadian Pacific is going through a major transition. The company has laid off large numbers of employees in Québec, closed its main rolling stock repair facilities in Québec (the Angus Shops), and moved its head office out of the province, resulting in a significant decrease in the need for translation. In 1989, CP's Translation Centre employed 15 people full-time (manager, revisors, translators, terminologists, a documentalist, and support staff); today only four full-time employees remain.

terminologists, 26 certified conference interpreters, 8 certified court interpreters, 413 associate members and 16 student members. Programs exist at various levels at several universities in Canada (McGill University, Concordia University, Université de Montréal, University of Ottawa, Université du Québec à Trois-Rivières, York University, Laval University, and Laurentian University) to train the translators needed for this voluminous work. In the 70s and early 80s, the Federal Government required so many English-to-French translators that a large-scale scholarship program was implemented, giving students funds to cover tuition, hiring them as trainees to work during the summer between the second and third years of the B.A. programme and, finally, requiring them to work for the Federal Government for two years following graduation.

Corporate translators far outnumber literary translators. Although most translators produce volumes of words during their careers, few translate books. Corporate translators specialize in the transfer of the information required by businesspeople in their day-to-day dealings from one language to another: letters, memos, reports, in-house publications, advertising and so on. Government translators handle much the same sort of texts for the government.

Obviously, given both the importance of translation in Québec and Canada and the huge volume of translation done there, translation quality is a major concern. This concern has been dealt with through translator qualification, and control over the translation process (through translation revision, terminological standardization, and contractual penalties for poor quality end products).

Translator qualification is a two-pronged process, ensured through education and membership in professional associations. Many employers insist that the translators they employ hold bachelors or masters degrees in the field and the examinations required for admission into the various professional translator associations serve as an additional means for screening out less qualified translators. This has been taken a step further in Québec where the *Ordre des traducteurs et interprètes agréés du Québec* now reserves the title of “certified translator” (“traducteur agréé”) for those who fulfill certain requirements with respect to training and experience.

The translation process is controlled in the work setting. Traditional corporate and government translation departments have tended toward rather rigid hierarchies under which junior translators are revised by more senior ones and senior translators are revised by revisors, to ensure standard quality². Similarly, the work of freelance translators working for such departments is revised by the in-house staff. The translation process in this kind of set-up has three steps, translation, revision and proofreading, generally performed by two to three separate individuals (sometimes more in the case of important documents such as annual reports).

As well, most of these departments have their preferred style guides and dictionaries. Many have also standardized their own terminology (through glossaries, vocabularies, lexicons, databases, and so on). The translators who work in or for these departments are expected to respect these standards and follow these guidelines. As a

² ‘Revisor’ is the term officially used in both government and corporate translation departments for the person who is officially responsible for ‘revising’ translators or, in other words, making sure that the translation is both accurate in terms of meaning and acceptable in terms of language quality.

further initiative to ensure conformity, contracts signed by freelance translators working for the Federal Government include restrictions as to the number of mistakes allowed per 1,000 words and monetary penalties for translations requiring heavy revision.

As a result of these initiatives, there would appear to be very little room for error in the translations produced. Yet, fifteen years' experience as both an in-house translator and revisor and finally as a freelance translator, for both small and large firms, and for both the private and public sectors, have led me to believe that the relationship between translators and the individuals or departments they translate for is not always comfortable or easy. I would even go so far as to state that there is a certain amount of veiled hostility between those who produce translations and those who 'purchase' them, and that the relationship between the two can even become quite adversarial at times. The common complaint of most translators and their revisors is that they have no role in the communication process, that the translator is called in at the last moment when the originator of any given document remembers that it must be published in both English and French. The most common complaint from the originator of a text which is sent for translation is that it somehow "sounds like a translation" and that the translation is either not the same as the original or not as good as the original. When I worked as a translator for CP Rail's Translation Centre and later as a translation revisor for CN's Linguistic Services department, I had clients specify that they wanted "more than just a translation", that they wanted an "adaptation", without defining exactly what they meant by that. The implication was that a "translation" was somehow "bad" or of poor quality whereas an "adaptation" was "good" or of better quality. Needless to say, the definition of "good"

and “bad” depends on the person doing the judging, and the context in which the judging is done.

In my experience, the criticism received from clients remained generic. The fact that they were largely unable to point out specific errors — spelling mistakes, grammar errors, poor style, unidiomatic usage, gallicisms (in the case of French-English translation), anglicisms (in the case of English-French translation) or even translation errors — remained a source of frustration in any discussion intended to alleviate the situation. Also, given the training of most translators and the systems of checks and controls in use, I found the clients’ criticism, whether explicit or implicit, both of the work I produced and that done by my colleagues difficult to understand and, at times, demeaning.

Another source of conflict between translators and their clients lies in the perceived purpose of translation departments. Traditionally, most of the employees working in corporate and government translation departments translate from English towards French, with only a small minority of the employees working in the other direction. Terminologists working in these same departments have also tended to focus on French terminology, as they are involved in both establishing correct terminology, standardizing terminology and then ensuring that all departments and employees use this correct, standardized terminology. The perception is that these departments were founded and then later expanded as a result of language legislation and that the translators serve as linguistic watchdogs.

This research grew out of a personal desire to understand the reasons for both the clients' criticism with respect to the products they receive and the adversarial relations between translators and their clients. My point of view will be that of a professional translator. There are few professional translators who have either written about what they do or developed theories about it. For the most part they are too busy with their work activities and have left this to researchers and academics. However, I feel that it would be valid for professional translators to contribute to translation research.

Translators are always hard at work, but they are producing translations, not translation commentary, criticism or theory; they appear as aesthetically sensitive amateurs or talented craftsmen, but are not critically self-conscious writers who develop an acute awareness of the cultural and social conditions of their work... What contemporary translators write about their work tends more often than not to collude with the image of the dilettante/artisan: their discourse remains casual, belletristic, limited to sporadic prefaces, interviews, invited lectures. (Venuti 1991, 1-2)

I will be looking at a corpus of translations produced by a specific group of translators. Frequently, translation research has focused on individual translators and individual translations. Two notable exceptions to this are Brisset (Brisset 1990) and Toury (1980), both of whom deal with corpuses. Yet, their focus is on literary rather than pragmatic translations whereas my corpus will consist of purely informative texts.

My goal is to document what a corpus of translations can tell us about both the translator and the environment in which the translation was produced. First, we must set aside any discussion of whether translation is possible. Obviously, it is being done and we have the translations to study. The dogma of untranslatability has little relevance to this research. Next, although it is impossible to set aside all discussion of whether a

translation is “correct” or “incorrect”, it is only tangentially relevant. In the past, the translator and the translation process were expected to remain invisible. Debate focused on whether a translation should be faithful to the style or the content of the original or if it was possible to provide a faithful rendering of both style and content. Recent research in literary translation has taken a very different approach. Authors such as Annie Brisset (Brisset 1990), Antoine Berman (Berman 1984), Susanne De Lotbinière-Harwood (De Lotbinière-Harwood 1991) and David Homel and Sherry Simon (Homel and Simon 1988) have stated that the translator is never an invisible part of the translation process. They go on to state that there is either a cultural or a political aspect to any translation. For instance, in her study of theatre translation in Québec from 1968 to 1988, Brisset (Brisset 1990) demonstrates a link between the specific plays translated into French for Québec and performed in the province during the period covered by her study and certain political realities in the province during that time. As another example, De Lotbinière-Harwood discusses how male translators of feminist works have done irreparable harm to both the authors and their works through sexist insensitivity. From their work, it is clear that the environment in which a translation is produced has an effect on the translation. The translations in my corpus were produced under the language management plans implemented by both the Federal and the Québec governments.

The translator/client relationship is marred in part by the fact that the client perceives, rightly or wrongly, the translations produced as lacking in quality. The question to be asked now is: given the client’s perception that a translation somehow “sounds like a translation”, despite the extensive efforts made within translation

departments to ensure translation quality, are we actually dealing with a problem of quality or perhaps, instead, a result of a particular style adopted by the translator(s). In other words, far from trying to remain an invisible part of the translation process, serving much like a channel for the original author (somewhat akin to spirit channelling), the translator plays a visible role in the process. This implies that the “style” used by the translator is not a haphazard result of the translator’s personal writing style or preferences with respect to the choice of words but may in fact be more akin to a “strategy” adopted as a result of the translator’s perception of his/her role in the translation process and that the translations produced reveal this strategy. As a result, it is the client’s perception of this strategy which could be the problem, not the quality of the translations themselves.

Furthermore, is the translator working on his/her own? Can translation strategy be attributed to a lone translator? Given the hierarchy and the revision process adopted by most large translation departments, under which junior translators are taught to conform to departmental standards by more senior translators, it seems illogical to me to attribute style to a single individual. Rather, it is the organization or institution which hires the translator and requisitions the translation which is responsible for determining how a text is to be translated. Specifically, it is the “translating institution” which determines translation strategy.

In conclusion, I want to determine whether translations reveal the translation strategy of either the translator or the translating institution. Specifically, I will be looking into whether the translated versions of several CN employee publications reveal certain emergent translation strategies.

I will start with a survey of the relevant concepts in the fields of translation studies, communication studies and management. Although combining these three fields may initially appear somewhat unusual, the purpose of the interdisciplinarity of this research, as in all interdisciplinary research, is to bring theory, concepts, definitions, approaches and methodologies from several disciplines together in an effort to build on a given field (in this case translation) rather than supplant it. The concepts of translation environment, the translating institution and translation strategy form the hub of the theoretical framework of my research. Other major spokes in this framework include the concept of the corpus and the notion that documents can provide information on several different levels, in addition to their stated content. This theoretical discussion will be followed by a description of the methodology used in this research and then a discussion of the findings.

PART I

TRANSLATION ENVIRONMENT, TRANSLATING INSTITUTION, AND TRANSLATION STRATEGY

Translation in Canada is subject to some very specific constraints. In the first place, translation is done to ensure communication between two large linguistic groups living within the same country, rather than between linguistic groups living in different countries.¹ Second, the language management policies and plans which have been

¹ Talking about Canada's two largest linguistic groups has always been highly delicate and complicated. Terminology alone is hard to formulate. There are many reasons for this. In the first place, despite official support for multiculturalism, both English-speaking Canadians and French-speaking Canadians resent being referred to as ethnic groups. At the same time, we can no longer refer to those two groups as Canada's two founding nations, since that excludes the First Nations, as well as various other groups. The designations 'French-Canadian' and 'English-Canadian' appear to imply the existence of two separate nations. Furthermore, many Canadians living outside Quebec resent being referred to as 'English' or as 'English-Canadians'. They may have assimilated into the English-speaking portion of the population, but they are not of English/British origin or descent. The titles 'French-speaking Canadians' and 'English-speaking Canadian' focus on the mother tongues of these two groups of Canadians. They are also rather broad in the sense that 'French-speaking Canadian' could include French-speaking people who are not native to Canada, while 'English-speaking Canadian' could include English-speakers not native to Canada. 'Francophone' and 'Anglophone' also focus solely on linguistic differences and are so broad as to include non-Canadians living in Canada. There are also problems with 'Quebecer' and 'Québécois'. Do these two terms refer to everyone living in Quebec or merely Francophones living in Quebec whose roots here go back to before the Seven Years' War? Do we have to qualify these two terms by using 'Anglo-Quebecer', 'Franco-Quebecer', 'New Quebecer' and so on? As can be seen, most of the expressions used are either inexact or wind up insulting someone. To further complicate matters, there are those individuals who seem to believe that such labels are unnecessary and that the term 'Canadian' should be used for all who live in Canada to refer to Canadians who speak English, Canadians who speak French, Native Canadians, and newer Canadians. I am unwilling to add to the confusion by attempting to develop new, more appropriate terminology, something which is impossible since naming is political and reflects changing relationships, I will merely try for some consistency and I will use all of these designations in their most basic of senses. For instance, specifically because I am only interested in the use of French and English within the federal setting (the federal government and CN, a specific Crown corporation) and the French-English and English-French translations produced by such organizations, I will use such terms as Francophone, Anglophone, French-speaking Canadian, English-speaking Canadian, Anglo-Quebecer and Franco-Quebecer to refer to the respective members of Canada's two largest ethnic groups. I will not refer here to newer Canadians, immigrants or Allophones living in any part of the country.

implemented as a result of the competition between the two major languages in use in Canada and Quebec have had a significant impact both on the amount of translation done here and the setting or environment in which it is done. At the same time, until recent years, translation has largely been the domain of the federal or provincial governments or large corporate translation departments patterned on the government translation departments and, as a result, large groups of translators have worked together for large organizations or institutes, rather than on their own as isolated individuals. Furthermore, during the course of their work, these individual translators have generally been moulded into homogenous groups, producing translations which meet institutionally recognized criteria of quality.

As a result of these factors, this study requires a knowledge of a specific translation environment, as well as an understanding of the theoretical concepts of the translating institution and translation strategy. Translation environment refers to the context in which translation is done; translating institution to the agency or organization responsible for having translation done; and translation strategy to how translation is done.

Translation Environment

The translation environment in Canada is a direct result of the competition between French and English, as languages, and the various language management plans and policies which have been developed and implemented to deal with this competition between languages.

Languages in Competition

It is a well-documented historical fact that languages are born and they die, that languages prosper, spread and decline. (Wardhaugh 1987, 1) To many people, the most basic reason for language spread and decline is that language is a means of communication and that new languages are acquired to meet new needs, while old languages die when they no longer serve any purpose (Wardhaugh 1987, 17). This would seem to imply that language spread and decline is solely a natural, evolutionary process. Languages, however, can be spread in any of several manners. For instance, as a result of religious expansion, Arabic is used as a religious language by Muslims in Kenya; military expansion carried Latin throughout Europe; migration brought English to North America and, more recently, Spanish to the US; colonialism carried French, Dutch, Spanish and English around the planet; and American economic and technological domination of the world has turned English into a world language. Linguistic expansion brings languages into contact and frequently results in linguistic pluralism.

Ce sont toujours des bouleversements politiques, militaires, sociaux, économiques ou technologiques qui provoquent l'apparition de multilinguisme. Les changements politiques de même que les conquêtes militaires ont été sûrement parmi les principales causes de multilinguisme, mais les impératifs économiques tels le commerce ainsi que certains changements technologiques récents ont favorisé également le bilinguisme ou le multilinguisme. (Leclerc 1986, 124)

Obviously, as diverse languages come into contact with one another, they also enter into competition with one another. It is to be expected that linguistic pluralism would generate linguistic conflict. Language can be a very passionate, burning issue and

“in a world of well over five billion people who speak several thousand languages among them but who are organized into less than two hundred states the opportunities for competition to turn into conflict are considerable.” (Wardhaugh 1987, vii). This would not be the case if the only function of language were communication. However, language has political and symbolic functions as well. Many people associate their cultural identity with a language, many their political identity, many others their social identity, still others their religion and, finally, many more their national identity. Linguistic conflict has several causes.

One cause is the attitudes of the speakers of a given language both towards their own language and towards others' languages. One example of this is the ethnocentric attitudes of many Americans with respect to language. For instance, in a custody case decided in Amarillo, Texas, in 1995 involving an English-speaking father and a Spanish-speaking mother, Judge Samuel Kiser of the Texas District Court ordered the mother to speak English with her five-year-old daughter saying, “You’re abusing that child and you’re relegating her to the position of housemaid.” The judge later issued an apology to the woman and to the profession of housekeeping.²

Another cause is unequal strength. Many people seem to believe that some languages are inherently ‘better’ than others. For instance, I have heard people express the opinion that English is easier to learn than a language such as French, that it is better suited for science, technology and business than other languages, and that it has more

² Source: *The Detroit News*, August 30, 1995.

words than other languages (which would seem to imply that it is ‘superior’ to other languages). Although linguists generally agree that no one language is truly better than another (Wardhaugh 1987, 11), it is true that some languages are ‘more powerful’ or ‘stronger’ than others.

Étant donné que les langues sont plus que de simples instruments de communication et qu’elles sont également médiatrices de projets sociaux, culturels, économiques ou politiques, elles n’ont pas la même force les unes par rapport aux autres. (Leclerc 1986, 122)

Linguistic strength has a number of sources. First, demographic strength is very important to the vitality of a language. Today, the most important languages in terms of number of speakers are (in order): Chinese, English, Spanish, Hindi, Russian, Bengali, Portuguese, German, Japanese, and French (Leclerc 1986, 137). In Quebec, the declining birth rate of Francophones has caused a shift in the relative strengths of French and English, to the detriment of French. Second, there is economic influence. In the 80s, five countries — the US, the German Federal Republic, Japan, France and Great Britain — accounted for 38% of all imports (primarily raw materials) and 40% of all exports (primarily manufactured goods) in the world, giving prominence to the English, German, Japanese and French languages (Leclerc 1986, 140). Third, there is military might, which also includes military conquest. The Roman empire provides probably one of the best examples of how military conquest can cause a language to spread. Under Roman rule, Latin replaced Greek as the vehicular language and maintained that position until the 17th century while several Germanic, Semitic and Celtic languages disappeared. Before Latin disappeared, it gave birth to several great modern languages: French, Spanish,

Portuguese, and Italian (Leclerc 1986, 126). A fourth source of linguistic strength is cultural influence. Cultural strength can be measured in terms of the number of books, magazines, newspapers and scientific publications produced in a given language, as well as the number of movies produced in that language, and the number of radio and television stations in operation. I would also add the number of languages which such publications and productions are translated into. Once again, the US is extremely influential in all of these areas and this fact contributes to the strength of English as a language (Smith 1980). Finally, there is political influence. During the post-WWII period and until the end of the Cold War, the two world powers were the US and the USSR. As a result, English and Russian have been very influential languages.

A third cause of linguistic conflict lies in the unequal roles which two languages occupying the same territory may play. In any bilingual or multilingual situation, the dominant language tends to maintain control over certain sectors of activity, usually those where power is exercised: government, school, financial and economic institutions, media and so on. The dominated language, on the other hand, is reserved for personal communication, family life and, occasionally, religious life. In this type of situation, conflict arises out of the unequal status of the languages, as in the case of Canada where, despite language legislation, French and English still do not enjoy the same status.

Language competition is not a recent phenomenon. What is new today is the importance the modern world places on language. This may be because of the rise of nationalism and the relationship between nationalism, culture and language.

It is probably only in the modern world that language has become such a powerful political symbol. Language has become symbolic of nationalism, and nationalism is a modern phenomenon. In the pre-nineteenth century world languages diffused and contracted as empires expanded or fell, or religious systems flourished or declined, or mercantile patterns changed. There was little direct management of language affairs by states and empires. Directives, orders, and laws there were, but these tended to affect the few rather than define long-term policies. It was only with the rise of nationalism in the late eighteenth century that language became symbolic of nationality and could be used as a focus for political and cultural struggle. It could also at the same time be used to expand a state's power both within and without and to resist similar expansionist policies of other states. Language diffusion could be managed and, because it could be, it was. (Wardhaugh 1987, 4)

Language management is an attempt to regulate or control competition between languages. Although many people would vehemently deny this, language management exists everywhere, in one form or another, either explicit or implicit.

Dans notre XXe siècle finissant, on ne connaît pas de pays qui n'aient pas fait, d'une façon ou d'une autre, de planification linguistique. (Leclerc 1986, 209)

Language Management

What I refer to as 'language management' can be broken down into language policy and language planning. Various definitions of language planning/policy are being and have been used.

Eastman (Eastman 1983) gives us the most basic of definitions, saying that language planning is used to determine which languages are used in political and social contexts, how they are used in such contexts, and how languages are represented.

According to her, language planning focusses on the decision making process which determines what language use is appropriate in society and how it affects the function of language (i.e. as a national language, official language, second language, minority language, etc.) within that society. She states that language planning is by nature future oriented (Eastman 1983, 16).

Leclerc (Leclerc 1986) uses the French expressions ‘planification linguistique’, ‘aménagement linguistique’, ‘politique linguistique’ and ‘dirigisme linguistique’ as well as the English expression ‘language planning’ to refer to government intervention in the linguistic decision making process as a deliberate effort to change the natural evolution of a language or the usual interaction between languages (Leclerc 1986, 208). Both Eastman and Leclerc use language planning and language policy virtually interchangeably.

Calvet (Calvet 1987) takes these definitions somewhat farther, differentiating between language policy and language planning.

Nous considérons la **politique linguistique** comme l’ensemble des choix conscients effectués dans le domaine des rapports entre langue et vie sociale, et plus particulièrement entre langue et vie nationale, et la **planification linguistique** comme la recherche et la mise en oeuvre des moyens nécessaires à l’application d’une politique linguistique. (Calvet 1987, 154-155)

Precisely because of this confusion between language policy and language planning and because few authors seem to make a conscious difference between the two,

I use the expression 'language management' to refer to both language planning and language policy together, so as to avoid ambiguity.

Tollefson (Tollefson 1991) adds one additional aspect to the concept of language management. He uses the expression 'language planning' to refer to "the institutionalization of language as a basis for distinctions among social groups" (Tollefson 1991, 16). He sees language planning as a means used by a dominant group for establishing and maintaining social inequality.

There are three major components to any language plan: language policy, language choice, and an evaluation of both policy and choice. The policy aspect of language planning has four steps: formulation, codification, elaboration and implementation. The formulation of language policy is a process of deliberation and decision making; this is the stage during which the goals are set. The codification stage involves setting out strategies for the practical achievement of those goals. During the elaboration phase, the language planners determine whether the language(s) chosen may be extended into the arenas specified in the goals. Finally, during implementation, the authoritative backbone needed to achieve the goals is provided (Eastman 1983, 12)

Language management looks at precisely how people behave with regard to language and what attitudes are expressed toward uses of various languages. Language management is generally applied to languages which exist within a geographical area. In Canada, federal language legislation applies to English and French within Canada and Quebec legislation applies to French and English as used within that province. However, language management could also be applied to languages which transcend borders, as in

the case of Esperanto or as in the case of sign language, which is used by people with hearing disabilities (Calvet 1987, 155). Language plans are always associated with an authority of some kind (either governmental or educational).

Reasons for Language Management

State intervention has become commonplace in many sectors of public activity such as the economy, education, social welfare, national security and environmental protection. The premise is that government intervention is needed because market forces do not adequately “address or solve perceived needs and problems prevalent in society”. (Bourhis 1984, 2). Therefore, there should be nothing surprising about government intervention in linguistic matters through language management.

The need for language management arises in situations of linguistic pluralism where competition occurs among the languages being used; this competition leads to social conflict. Furthermore, there must be an awareness of that competition and social conflict as well as a desire to intervene (Leclerc 1986, 210). The need for language management intensifies as the competition between languages increases. For instance, English in the US faces virtually no competition from Italian or French. However, competition between English and Spanish is much more pronounced, and we are starting to see language policies which concern that language, as in the case of various amendments concerning bilingual Spanish-English education (Leclerc 1986, 210).

Types of Language Plans

There are two basic dimensions to language planning: status planning and corpus planning. Status planning determines how nations, states or groups perceive one language in relation to another. It involves choosing which language (or languages) will be used, by whom they will be used, and when they will be used. Categories of language such as official language, national language, second language, and minority language are important. Corpus planning is carried out on the language itself. It involves graphization, modernization and standardization, and may involve developing new terminology, standardizing terminology, changing or standardizing spelling, adopting new script, and so on. It extends to literacy training, second-language teaching, and lexical elaboration (Eastman 1983, 103).

Obviously, some plans will incorporate only one of these dimensions, while others will incorporate both. For instance, language planning as implemented in Quebec, involves both status and corpus planning. The decision to make French the official language of Quebec involved status planning, while the establishment of the Office de la langue française to oversee French usage is corpus planning. On the other hand, the language plan implemented by the Federal government through the *Official Languages Act* primarily governs the status of French and English as the official languages of government business.

Types of corpus planning

Corpus language planning has at least one of five goals: language purification; language reform; language standardization; lexical modernization; and language revival (Eastman 1983, 28). At one point or another, each of these five goals has served as the basis of a language policy adopted by a specific planning agency. For instance, language purification was attempted with French; revival with Cornish and Irish; reform with Chinese; standardization with Swahili, and lexical modernization with Egyptian, Arabic, Danish, and Hebrew. Obviously, the first four of these involve corpus planning, while the last involves status planning.

a) Language purification. Language purification involves the prescription of ‘correct’ usage and the preservation of a language’s ‘purity’, by removing loan vocabulary or script. It strives to ensure that the language is truly a language of the nation (in the case of a national-language choice) or of the group (in the case of an ethnic-based choice). For a purification plan to succeed, a policy-formulating body such as an academy must be set up. It usually helps if the academy is an arm of the government and has the authority it needs to impose its will. This academy generally seeks to maintain the language in its pure state and opposes change in spelling, grammar and vocabulary, particularly if that change results from influence outside the language in question and outside the nation-state which uses that language. Language purification is helpful when political

centralization is the goal. A classic example of this type of language planning can be found in the efforts of the Académie française to purify French.³

b) Language reform. Language reform plans involve making a language easier to use by, for example, simplifying its vocabulary or spelling system. It is generally undertaken simultaneously with some other type of language plan, such as language purification or revival. Language reform has had only limited success. The classic example of language reform is that of Turkish (Eastman 1983, 220), which began in 1922.

c) Language standardization. Language standardization plans involve ensuring that one language or dialect in a region is accepted as the major language of that region for general use. It is undertaken when a single language is needed as a vehicle of communication. One example of language standardization is Swahili (Eastman 1983, 225).

d) Lexical modernization. Lexical modernization (Eastman 1983, 233) involves bridging the gap between a language's lexicon and new terminology which arises out of modern technology. This type of language plan generally involves efforts to update vocabulary and create new, frequently technical terms. There are two types. In the first type, new terms are created in order to revive, reform, or standardize a language. In the second, new terms are created in order to adjust an already revived, reformed or

³ The Académie française, perhaps the most well-known of puristic agencies, was founded in 1635 and is still functioning today.

standardized language to new scientific and technological ideas. Swedish is an example of a language which has been subjected to lexical modernization.

e) Language renewal. Under this category, I have grouped together such concepts as language revival, language restoration, language resurrection and language re-introduction. Basically, this type of language plan generally refers to an attempt to re-establish a language that is no longer a normal means of conversation and communication among people. There are several reasons for reviving a language. In some cases, language revival is undertaken so that people who have lost their language might regain it as part of maintaining or regaining their ethnic identity. In other cases, it is undertaken when a need for a common language of communication arises. In still other cases, it is undertaken when people living in a given area have lost their language and choose to revive the original language used in that area to satisfy their communication needs. The revival of Hebrew in Israel is listed as the only successful instance of language revival. (Bourhis 1984, 8)

Types of status planning

Language plans which focus on status planning have goals of non-intervention or assimilation, propose either personal solutions or territorial solutions to language conflict, or are put forward as part of an effort towards decolonialization.

a) Non-intervention. Some countries or regions have deliberately chosen to ignore language problems and conflicts and to allow the relationship between the languages used within their borders to evolve 'naturally'. It is hoped that if no action is taken, the situation will resolve itself. (Leclerc 1986, 22). Although these groups would most likely insist that they do not actually manage language, non-intervention does in fact represent a choice. Non-interventionist policies are really nothing more than very subtle plans aiming at the assimilation of a minority language group by the majority group, since non-intervention always results in linguistic homogeneity. Countries or regions which have adopted non-interventionist language plans include: British Columbia, US, Mexico, Paraguay, Ecuador, Peru, Bolivia, and the Ivory Coast (Leclerc 1986, 220-230).

b) Assimilation. The countries which have adopted policies of linguistic assimilation have the same goal as those which have opted for non-intervention: linguistic homogeneity. However, they have also chosen to take more overt and direct action to achieve their goal (Leclerc 1986, 231). Countries which practice policies of linguistic assimilation include: Brazil, China, Turkey, Iran, Iraq, Syria, the USSR and Indonesia (Leclerc 1986, 231-243).

c) Personal solutions. Personal solutions to linguistic conflict are adopted to facilitate the cohabitation of two or more languages in a single area. They are based on the personal or individual rights of the inhabitants. There are three types of personal solutions: non-discrimination, different legal status, and institutional bilingualism.

i) Non-discrimination

States which have adopted language policies based on the principle of non-discrimination guarantee their linguistic minorities the right to speak their language(s) and protect them against discrimination. This type of privilege is usually incorporated into a country's declaration of human rights or its constitution. Countries which have opted for the principle of non-discrimination include: Austria, Poland, Hungary and Rumania (Leclerc 1986, 245-246). Governments which adopt this type of policy do not provide any kind of services in the minority languages. Since the language of work, education and government is still the majority language, this type of language policy ultimately leads to the linguistic assimilation of the minorities in question (Leclerc 1986, 246).

ii) Different legal status

Although some minority languages are not recognized as official languages, they are given special legal protection. This occurs when a government legislates the use of the minority language in certain sectors, such as education, in order to protect a national minority, on the basis of individual rights. In this case, the minority group does not enjoy the same rights as the majority and its language has a different legal status. Areas where this type of language planning is practised include: the Netherlands, certain regions in France, and Ontario (Leclerc 1986, 246-255).

iii) Institutional bilingualism

Under language policies which are based on non-discrimination and different legal status, minority language speakers tend to become bilingual. The remaining formula for a personal solution to language conflict, institutional bilingualism, allows minority language speakers to remain unilingual (at least in theory), while obliging the government to become bilingual. Areas where institutional bilingualism is practised include: Cameroon, New Brunswick, and Canada (Leclerc 1986, 259).

d) Territorial solutions. Territorial solutions to language conflict are based on the principle that languages in competition should be separated (Leclerc 1986, 275). This type of policy can apply both in countries which are officially unilingual (such as Spain and Italy) and in those which are officially bilingual or multilingual (such as Finland, Switzerland, Belgium and India). Under this type of situation, minority language speakers are entitled to use their language(s) only in those areas where they are sufficiently numerous.

e) Decolonialization. Areas or countries which are former colonies have had to adopt language policies with the languages imposed by the former colonialists (Leclerc 1986, 333). For instance, Madagascar has chosen to replace French and Indonesia has chosen to replace Dutch. India, on the other hand, has chosen to retain English as a common language in a country which is extremely multilingual.

Language Planning in Various Countries: Models

Although planning exists virtually everywhere and almost all countries have language policies (either implicit or explicit), whether they are unilingual, bilingual or multilingual, Belgium, Switzerland and Canada are three bi- or multilingual countries which receive considerable attention in discussions of language policy. The US also receives considerable attention as a result of its linguistic homogeneity. Belgium, Switzerland and the US are all of interest because of the ways in which they have chosen to manage their languages, because of the fact that their models could easily have been adopted here in Canada, and because these countries all use one or both of the languages of interest to this research: French and English. Belgium and Switzerland would generally be described as having adopted ‘territorial’ solutions to their linguistic problems, while Canada has implemented institutional bilingualism nation-wide and Quebec has opted for a territorial solution within its borders.

United States

The United States is a prime example of an officially unilingual country with an implicit language policy. Because there is no official, written policy, many Americans would (wrongly) claim that their country has no language policy. However, the US does have a language plan; it is non-interventionist in nature. There is, at present, an ‘Official English’ movement which has proposed the English Language Amendment (ELA) which would declare English the official language of the US. The proponents of the ELA seem to firmly believe that: the US has always been a monolingual, English-speaking country;

that, for the first time in US history, this monolingualism is threatened by bilingual education, bilingual voting, and other measures that will help other languages to gradually displace English; that today's immigrants differ from those in the past in that they come from Latin America and Asia rather than Europe, and are often unwilling to learn English; that the use of languages other than English delays the economic, cultural and linguistic assimilation of immigrants; that multilingualism (and multiculturalism) threatens the political and cultural unity of the US; and that this is the first time which the US has considered establishing some sort of official language policy.

A quick look at the linguistic history of the US reveals how incorrect several of these presumptions are. In the first place, the US has not always been unilingual English. In fact, I would describe the US as a multilingual country whose official language is English. At various points in its history, very large segments of its population have spoken German, French, Spanish or one of the Scandinavian languages as their first language. And during times when these languages were extremely influential, they were used on voting ballots and in bilingual legislation. Despite that, English has not been displaced. Rather, there has been an implicit language policy encouraging the displacement of other languages and the assimilation of linguistic minorities. For instance, statehood has generally been conferred only after a region could prove that it was overwhelmingly English speaking (Baron 1990). This argument has been used to account for the fact that Puerto Rico is still not a state. Furthermore, the statement that the US government has never had a policy obliging people to learn English is false. At several points during the course of their history, various states have enacted legislation

forcing residents to pass a literacy test (obviously, in English) in order for them to be able to vote (Baron 1990, x). This was in fact a language policy and did effectively oblige people to learn English. As to claims that the lack of a knowledge of English impedes the economic, social and cultural assimilation of immigrants, there is little evidence to prove that immigrants (especially those of the non-white variety) are assimilated even after they have mastered English one or two generations after arriving in the US. There is also little evidence to show that they ever enjoy the economic and financial benefits that speaking English fluently is supposed to entitle them to.

Belgium

Belgium, a small country with an area of 30,507 km² and a population of approximately 10 million inhabitants, is multilingual: 56% of Belgians speak Dutch, 43% speak French and 0.66% speak German (Leclerc 1986, 294). It is divided into four linguistic regions and each is a separate territorial unit: the Dutch, French and German areas, and the bilingual area of Brussels. There are three cultural communities, Dutch, French and German, with three cultural commissions. There are also three political and administrative regions: Flanders, Wallonia, and Brussels. The two large administrative areas are unilingual on all levels and, once again, Brussels is bilingual. Linguistic parity between the languages is required in Cabinet appointments and the voting system requires double majorities so that no one linguistic group can force its will on another by a simple majority vote. Minorities are assured protection. The government operates by means of 'parallel linguistic networks' (Leclerc 1986, 297), whereby 40% of all civil

servants are unilingual Dutch, 40% are unilingual French, and 20% are bilingual. The French network works solely in French and the Dutch network works solely in Dutch; communication between the two networks is ensured by the bilinguals. Linguistic conflict is common in Belgium. Although the adoption of a territorial solution under which the two competing languages are kept separate has solved a portion of Belgium's linguistic problems, conflict still occurs in the areas where the two languages co-habit.

Switzerland

Switzerland's 6.5 million inhabitants can be divided into four linguistic groups: 69.3% speak German, 18.9% French, 9.5% Italian and 0.9% Romansch. German, French and Italian are official languages while Romansch is a national language. Each linguistic group occupies its own territory and the linguistic borders, which have remained unchanged for over 1,000 years, pre-date the founding of the country. Switzerland is often cited as a model for multilingual states. This linguistic harmony stems from a combination of keeping the languages apart and a system of government that is highly decentralized. The three official languages are considered as equal to one another and none is a minority language; although the national language, Romansch, is also given equal status in theory, it does not always enjoy the same status in practice (Leclerc 1986, 303) and this does result in some linguistic tension. Switzerland operates on a principle of absolute territorial unilingualism. That is, each region ('canton') maintains its linguistic integrity and is not obliged to provide services in anything but its official

language. Exceptions to this principle are made only in officially designated bilingual cantons and municipalities.

On a federal level, all laws are adopted in German, with the French and then Italian translations following later. Territoriality also governs communication between the federal government and its citizens: the place of residence determines which language is used. Despite this, individuals can address their government in the official language of their choice and obtain a response in that language. The country operates in such a way that problems are 'localized' or dealt with only in the area in which they occur while the other areas remain uninvolved.

Canada

Today, although Canada is a multilingual country, it is predominantly English-speaking.⁴ Following the conquest of New France, the two major language groups in what was to become Canada were French and English. In 1841, Lord Durham recommended the gradual assimilation of the Francophone population into the Anglophone population. However, this advice was not heeded and when the *British North America Act* came into force, it guaranteed linguistic rights such as a bilingual federal government. However, these guarantees were basically symbolic in nature since, for example, Francophone MPs used English in Parliament when they wanted to be understood by their Anglophone colleagues. Furthermore, the Anglophone majority

⁴ French is the official language in Quebec and New Brunswick is officially bilingual. Although the remaining eight (of 10) provinces have not legislated any official language status, English is the language used by their governments.

consistently refused to acknowledge the ‘French fact’ as can be seen in the battles which Francophone Canadians had to fight to obtain such ‘privileges’ as bilingual stamps (1927), bilingual bank notes (1936), simultaneous translation in Parliament (1958), and bilingual federal cheques (1962). (Leclerc 1986, 270)

Although members of both language groups were once found throughout Canada, since 1900 English Canada has become increasingly unilingual English and Quebec has increasingly tended to become unilingual French. Today, 96% of Francophone Canadians can be found in Quebec and the provinces bordering it on either side, Ontario and New Brunswick. Furthermore, Quebec’s Anglophones have increasingly concentrated in Montreal (Leclerc 1986, 1232).

In 1963, the federal government set up the Royal Commission on Bilingualism and Biculturalism to find a solution to Quebec’s increasing alienation from the rest of Canada. That commission described the existing situation as “un désordre linguistique” (Leclerc 1986, 270), drew attention to “grave inequalities in the opportunities for the French-speaking minorities (as compared to Anglophone minorities) to have an education in their mother tongue” (Bourhis 1984, 229), and commended the provision made by Quebec with respect to the education of the children of its Anglophone minority (Bourhis 1984, 229). It proposed a system of institutional bilingualism which far exceeded the provisions of the *BNA Act*.

In 1969, in response to the recommendations of the B&B Commission, the federal government adopted the *Official Languages Act*, giving official status to both English and French in the case of agencies and institutions which come under federal jurisdiction.

With this act, the federal government adopted a 'personal' approach to its linguistic problems (as defined by Leclerc), whereby the federal government would accommodate the linguistic preferences of Anglophones and Francophones in the provision of federal services across the country. It rejected any territorial solution to its problems. This approach was later reinforced by the adoption of the *Charter of Human Rights and Freedoms* and the new constitution of 1992.

Quebec

Prior to the implementation of Quebec's language policy, English was the dominant language in Quebec spoken by the minority, while French was the subordinate language spoken by the vast majority of the population (Bourhis 1984, 56). The Quiet Revolution of the 1960s accelerated the growth of nationalism in Quebec and enhanced the resentment of many Francophone Quebecers towards their subordinate status.

Four factors led the Quebec government to intervene in language matters: the decline of the Francophone population outside Quebec; the sudden decline in Quebec's birth rate; the increasing tendency of immigrants to Quebec to assimilate into the English-speaking minority through the education system; and the fact that English-speaking interests controlled decision-making in Quebec's business and industrial sectors (Bourhis 1984, 31).

Quebec's language policy is the result of three pieces of legislation adopted by three different governments over a period of eight years: *Bill 63* (adopted by the Union National government in 1969); *Bill 22* (adopted by the Liberal government in 1974) and

Bill 101 (Adopted by the Parti québécois government in 1977). These three acts served to reverse the status of the two language groups and their languages, giving Francophones the status of a majority and rendering Anglophones a minority (despite the fact that they remain a majority in Canada and North America). Although it was *Bill 22* (the *Official Language Act*) which made French the official language of Quebec, *Bill 101* (the *Charter of the French Language*) made Quebec both institutionally and socially a unilingual French state. Both of these acts were intended to open doors for Francophones aspiring to management positions in the private sector, without changing the basic ownership structure of the economy, while integrating the dominant overwhelmingly English-speaking corporations more solidly into the fabric of Quebec's social life (Bourhis 1984, 134). *Bill 101* was also intended to curb the growth of the English-speaking community and diminish its status (Bourhis 1984, 40).

It is interesting to note that while the Federal Government has adopted personal approach based on guaranteeing the personal or individual rights of inhabitants and opted for institutional bilingualism, the overall approach implemented by the Quebec government is territorial. However, the originality of the Quebec solution to language conflict lies in the fact that while it has opted for territorial French unilingualism in the case of the Francophone majority, it has extended certain personal rights and guarantees to its Anglophone citizens. For instance, Anglo-Quebecers can speak English at the National Assembly, can receive English translations of all Quebec legislation, have their own education system (from kindergarten to university), and receive government, social and health services in English.

Canada's Language Policy vs. Quebec's Language Policy

Linguistic tension within both Canada as a whole and within the Province of Quebec is still considerable. First, there is the entire debate about whether language can or should be managed. For instance, one thing that has always frustrated me when discussing language management with unilingual English-speaking Canadians is their presumption that language is something that cannot be planned, that language policy is only for languages which are dying out, and that any language which needs to be protected through a language policy really ought to be allowed to die out. They appear to be implying that there is no policy concerning English and they like to point out how 'well' English is doing (as far as becoming a world language), so perhaps other languages should follow suit. However, I believe that these individuals have not understood exactly what language planning and language policy are, that they see the spread and decline of languages as a purely 'natural' phenomenon, and that they do not see implicit language plans as having the same effects as explicit ones.

This debate over the validity of language planning is quite intense with respect to the linguistic situation in Quebec. However, it involves little consideration of the economic and political factors which affect linguistic vitality. Also, many Anglo-Quebecers refuse to accept the fact that language planning in Quebec is largely a consequence of their own attitudes and actions.

What has not quite dawned on the consciousness of English Quebec is their concern over what academics call 'language planning' is the rather obvious fact that English Quebec is itself at the root of much of it. Apart

from a certain perception whereby anglophones felt they were the butt of a campaign of revenge in retribution for the sins of long-dead cultural progenitors, there is little collective awareness of the fact that language planning in favour of French is a reaction to the nature, shape and evolution of Anglophone society in Quebec. (Bourhis 1984, 205).

Second, there is the general hostility of much of English Canada with respect to the *Official Languages Act*. Many Anglo-Canadians view that act as 'ramming French down their throats.' Perhaps, some of this conflict has arisen out of a lack of understanding. For instance, an 'official' language is merely one that is used for government purposes. The federal government has adopted both French and English as 'official' languages, thereby guaranteeing that it will do business in both languages in areas which are designated as bilingual. There has been no attempt to impose bilingualism on individual Canadians.

...it is not always realized that bilingual countries were not created to promote bilingualism, but to guarantee the maintenance and use of two or more languages in the same nation. (Juhel 1982, 16)

Furthermore, the *Official Languages Act* has not been particularly successful. After more than 20 years, it is true that Parliament is more bilingual. However, the annual reports submitted by the Commissioner of Official Languages each year still complain about the slowness with which certain government departments (Employment and Immigration, Transport, Agriculture, for instance) and Crown corporations (such as CN, VIA Rail, the RCMP, the Canada Post Corporation) have been implementing the provisions of the act. Leclerc attributes this lack of success to the ambiguous wording of the legislation and the failure of Anglo-Canada to accept it (Leclerc 1986, 272).

Third, there is the response of both Anglo-Canada and Anglo-Quebec to the 'official' status of French in that province and the *Charter of the French Language*. This act has received a great deal of negative media attention from the Anglophone media throughout the country. Public charges have been made that the Quebec government has been treating its Anglophone minority unfairly. However, individual Anglo-Quebecers can communicate with their government in English, address the courts in English, and receive all government services and benefits in English. It is also possible for Anglophone students in Quebec to study from kindergarten to the Ph.D level in English. The Anglophone minority in Quebec enjoys many privileges and rights.

The true function of both the federal and Quebec language policies must be considered in order to uncover the reasons for this hostility, to both federal and Quebec language policy.

Leclerc writes that most language plans ensure the dominance of the majority language (Leclerc 1986, 33). This is the explicit goal of policies of non-intervention and assimilation. Furthermore, language policies which are intended to protect minority languages (non-discrimination, different legal status, institutional bilingualism) also serve to maximize the rights of the majority group and minimize those of the minority group. Leclerc concludes that territorial solutions provide better protection for minority languages than personal solutions because they separate the languages in question and eliminate competition (Leclerc 1986, 333).

Quebec has opted for a territorial solution. However, despite the fact that a more territorial solution might have been warranted on the federal level, given the increasingly

geographic division of the two linguistic groups in Canada, the federal government has categorically rejected a territorial solution to linguistic conflict. Opposition to a territorial solution is overt and widespread. For instance, in the *Montreal Gazette* of February 19, 1994, Federal Francophone MP Don Boudria is quoted as saying that an end to official bilingualism (as allegedly supported by the Reform Party) would “Belgiumize” Canada or result in “territorial bilingualism as is current in Belgium, with Quebec becoming almost wholly French, and the rest of Canada wholly English.”

Quebec’s territorial solution is intended to protect French in Quebec within Canada. Yet it also provides adequate protection of Anglo-Quebecers’ rights. Anglophone hostility to Quebec language policy is more a result of a loss of majority or dominant status there than any real loss of rights or privileges. It would appear that much of Canada’s language policy is intended to ensure the dominance of English in English Canada and to protect the English minority in Quebec rather than French minorities elsewhere in Canada.

En conséquence, si en théorie, le bilinguisme institutionnel a pour but d’assurer l’autonomie linguistique aux personnes de souche anglaise ou française, dans la pratique, force est de constater que le bilinguisme institutionnel perpétue, voire intensifie, le bilinguisme individuel des francophones et, par contre-coup, l’unilinguisme des anglo-canadiens. (Juhel 1982, 22).

Translation Environment Specific to Canada and Quebec

Translation in the Canada/Quebec context is needed to bridge the language barriers between two language groups living within the same geographical and political territory. It is performed under two distinct language plans and is, in fact, essential to

both the federal policy of institutional bilingualism and the Quebec policy of territorial unilingualism. In the case of federal language policy, individual Canadians are legally entitled to remain unilingual. This requires translation. In the case of Quebec language policy, Quebec has relied on translation to implement its francization policies, both by enabling the Government of Quebec to communicate with its citizens and with the rest of the country in French and by improving the quality of French used. Both policies have had a significant impact on the volume of material translated, the type of material translated and the nature of those requiring translation. First, in terms of volume, the demand for translation grew dramatically in the 1970s (Juhel 1982, 45) and is still increasing. English has been primarily the translated language and French the language of translation until recently. (Delisle 1980). However, as Quebec's francization program succeeds this has been changing and the demand for French to English translation is increasing as more and more documents are being written in French.⁵ Second, in terms of types of documents translated, the focus has been on texts of a pragmatic or utilitarian nature, rather than literary material. Third, regardless of the direction of translation, the major translation employers and clients, namely those who require, order and pay for translation, are not individuals, but rather institutions.

⁵ Based on private communication with various member's of the OTIAQ English Translators Workshop from 1996 to 1998 concerning the problem of increasing workloads and the ability of workshop members to satisfy demand.

Translating Institution

The organizations or institutions which, either directly or indirectly, require translation services include corporations, churches, government, and newspapers. Mossop coined the expression, ‘translating institution’ (Mossop 1988) to refer to these organizations, stating that the individual translator is not working in isolation and that it is the “translating institution” which determines how translation is done. Mossop provides no specific definition, merely the rather generic list already indicated. Yet, he does refer to concrete, tangible entities.

Hints of the Existence of the Translating Institution

Mossop does not appear to be alone in his belief that forces or even agencies external to the translator affect how translation is done. Authors such as Susanne de Lotbinière-Harwood (de Lotbinière-Harwood 1991), Gideon Toury (Toury 1980), Edwin Gentzler (Gentzler 1993), and André Lefevere (Lefevere 1992), all consider translation as a rewriting of an original and state that all rewritings reflect a certain ideology, hinting at the existence of some sort of force or agent which controls how translation is done through both context and ideology, without referring specifically or directly to the concept of a ‘translating institution’ and without providing any definitions. At times, their “translating institute” would appear to be considerably less tangible and concrete than Mossop’s, serving more to identify general trends or styles affecting the translation decisions of a common group of translators operating at a given time under a given set of

constraints, while, at other times, they refer to specific agencies which dictate translating style and choices.

Writing from a feminist point of view, de Lotbinière-Harwood focusses on translation as a rewriting in the feminine. Her purpose is to give women's voice more of the prominence it deserves, stating:

As the title of this book indicates, my translation practice aims to make the feminine visible in language so that women are seen and heard in the world. (de Lotbinière-Harwood 1991, 112)

While pointing out the harm that male translators have done to authors such as Simone de Beauvoir and Violette Leduc, and the serious damage they have caused to the messages they were translating, she claims that the translator is never neutral, never invisible, and further argues that it is the context which determines the translator's choices. This represents a more generic view of the concept of institution, much like that of the patriarchal institution, which, while controlling and dictating behaviour and choices, is not one single, physical entity or organization. Yet, she also mentions specific institutions (such as editors or employers) which control translation decision making through both their influence on the translating context and the fact that they hire (and fire) translators and do, as a result, exert control over the work of such translators.

Context is composed of all the determinants specific to each and every translation situation, all the strands and factors we must weave to make appropriate translation decisions. As the above situation illustrates, factors determining context include the gender of the author, the translator and the person written about, as well as the nature of the publication venue, the editor's or employer's politics and the target audience or market. Readership can extend into geographical-cultural considerations. I would produce a different English translation for a Quebec Anglophone audience than for an English-Canadian one, and yet another version for an

American one. Socio-economic and political conditions, too, enter the context or reference frame. Conservative times tend to produce conservative translations. Accordingly, employers and editors tend to be less favourable to feminist language experimentation when the pendulum swings toward traditional values. (de Lotbinière-Harwood 1991, 120)

De Lotbinière-Harwood also discusses the 'impermanence' of translations, likening translations to the performance arts.

As creative forms, translation and performance are alike in their relation to time. Both are ephemeral. Original works endure but their translations do not. Performance art is scripted in the present tense. There is no such thing as a 'definitive' version of a translated literary work. Performance is not based on written texts and is not aimed at a 'lasting repetition'. As historically situated texts produced by and for their times, translations need to be redone every so often. Which is why Shakespeare's plays exist in so many different translated versions. The Violette Leduc/Derek Coltman and Simone de Beauvoir- H.M. Parshley cases discussed earlier are perfect examples of the impermanence of translations. Knowing what we know now, these once acceptable translations are no longer valid, which further demonstrates how closely translation is embedded in its socio-cultural context. This social inscription, another feature that translation shares with performance, 'cannot be disassociated from its context'. The plural, contexts, would be more accurate, for both practices are framed by their social, cultural and political settings. (de Lotbinière-Harwood 1991, 160).

Although few feminist writers or translators would quite want to consider themselves part of an institution and are actively involved in the re-writing and manipulation process to remove women's writing from the silence imposed by the patriarchal institution, the very contexts and impermanence de Lotbinière-Harwood refers to reveal the existence of a translating institution, once again in a generic and not specific sense, that changes from time to time.

Toury (Toury 1980) also hints at the existence of a translating institution, once again in the generic sense, without discussing the concept explicitly. He criticizes

traditional theories which concentrate on translation equivalence, saying that almost every existing translation theory has a notion of translatability and then arguing that rather than including notions of translatability, these theories reduce translation to translatability (Toury 1980, 26-27). While he agrees that such theories have always been a basis for applied disciplines such as the training of translators, static translation criticism and programming for machine translation, he prefers an approach which looks at why a translation is considered equivalent. For him, this would involve looking at the network of constraints within which a translation is produced as well as at the concept underlying translations and expressed by translations which would reveal translational norms.

One of the tasks of this branch of translation studies will be to account for the relationships actually obtaining between a body of translated items serving as its corpus (be it a single text, the total variety of solutions to a certain, well-defined translational problem, the entire production of a certain translator, school of translators, period, literary genre or whatever) and their respective sources, and define that concept of equivalence which is pertinent to the corpus and the entire concept of translation underlying it. (Toury 1980, 90)

He believes that a descriptive, as opposed to prescriptive, approach to translation criticism could also be used for training students, namely for training them consciously to either fit into a certain existing trend or pioneer new ways by breaking with accepted or as he calls them, petrified, norms (Toury 1980, 31). I believe that this underlying concept, this existing trend or these norms could be considered a translating institution, once again in a generic sense.

Gentzler also writes about translation as rewriting and all rewriting as a manipulation. He speaks primarily of literary translation, describing how it is undertaken in the service of power and can both introduce new concepts, new genres and new devices while also repressing innovation, distorting and containing. (Gentzler 1993, ix) He states that a study of the manipulative processes of literature can help us to understand the world in which we live (Gentzler 1993, ix), but I would extend that to say that the study of the manipulative processes of translation can also help us understand the world in which we live. He does specifically mention 'institutional manipulation', but only with respect to literary translation, stating that Euro-American translators tend to resist the idea that institutional manipulation influences translation. He also discusses Nida's theories of Bible translation and it is here that he seems to get the closest to saying that a particular translating institution affects the translations produced. He specifically states that Nida's theories were influenced by the Protestant belief that the Bible is there to convert. He also argues that Nida provides an excellent example of a translation which involves the manipulation of text to serve religious beliefs.

Lefevere (Lefevere 1992) agrees that translation is a rewriting and reflects a certain ideology. He further states that the acceptance or rejection of a translation depends on very concrete factors such as: power, ideology, institution and manipulation. Lefevere discusses in detail how literary translations are manipulated to make them acceptable in the target culture.

Defining Translation Institution

Thus, it can be seen that there are two components to the definition of ‘translating institution’. First, there is the more generic aspect, in which the notion does not refer to a specific agency or organization, but to more generic trends or influences. Second, there is the more specific aspect of a concrete organization or agency. Both are valid and both apply to my study of translation at the Canadian National Railway (CN).

In generic terms, the ‘translating institution’ refers to all translators and all groups requiring translation within Canada/Quebec. Since the translators working here have received similar educations and training, the large government and corporate translation departments share a common organizational structure, and the use of large, standardized terminology databases such as the Quebec Government’s *Le grand dictionnaire terminologique* and the federal government’s *Termium* are generalized across the industry, the translations produced share certain similarities, in terms of accepted translation techniques and procedures which are evidence of a translating institution.

In specific terms, as referred to by Mossop and mentioned by de Lotbinière-Harwood, the “translating institution” institution refers to the specific organization which orders and pays for translation. Yet, I would narrow down the organization somewhat more than Mossop. Specifically, I do not believe that the Government of Canada could be considered the translating institution since it is too vast and diverse. Furthermore, it is not the government itself which controls or influences translation. Rather it is the specific department responsible for translation (the Secretary of State) which must be considered the translating institution. Likewise, while many organizations or companies

could be considered the translating institution, the subject of my study (CN) is too large to be considered sufficiently homogenous to exert much influence over the translations produced for it. Rather, it would be CN's linguistic Services department which must be considered the translating institution.

The concept of the "translating institution" is extremely basic. Essentially, translators working for corporate or government translation departments do not make individual decisions as to how they will translate. Rather, it is the group, organization or department to which they belong which makes such decisions and this should be apparent in their work.

Evidence of the Translating Institution

Evidence of the translating institution can be found in Bruno Bettelheim's discussion of the English translation of Sigmund Freud's writings. Bettelheim (Bettelheim 1983) is highly critical of the English translations of Freud's works, saying that they are faulty both in word and in spirit — seriously defective in certain respects — and that they have led to erroneous conclusions not only about Freud the man, but also about psychoanalysis (Bettelheim 1983, vii).

When, in middle age, I was fortunate enough to be permitted to start a new life in the United States, and began to read and discuss psychoanalytic writings in English, I discovered that reading Freud in English translation leads to quite different impressions from those I had formed when I read him in German. It became apparent to me that the English renditions of Freud's writings distort much of the essential humanism that permeates the originals. (Bettelheim 1983, 3-4)

Two notable examples of what Bettelheim terms ‘mistranslations’ are *Ich* and *Es*.

Bettelheim states that these words are very simple, basic words in German and that they are among the first words every German child learns. They have been translated into English as ‘Ego’ and ‘Id’. But why wasn’t *das Es* translated into ‘the it’ as it was translated into *le Ça* in French? Yet, Bettelheim does not attribute these mistranslations to ignorance or mischievousness on the part of the translator, but rather to an attempt to lure the reader into developing a ‘scientific’ attitude towards man and his actions as described by Freud. He further states that only the wish to perceive psychoanalysis as a medical specialty can explain why some of Freud’s most important theoretical concepts were translated not into everyday English but into a language whose most familiar use today may be for writing prescriptions (Bettelheim 1983, 52-54). Bettelheim’s analysis of the translation of Freud is further commented on and supported by Venuti.

This method of symptomatic reading can be illustrated with the translations of Freud’s texts for the *Standard Edition*, although the translations acquired such unimpeachable authority that we needed Bruno Bettelheim’s critique to become aware of the discontinuities. Bettelheim’s point is that the translations make Freud’s texts ‘appear to readers of English as abstract, depersonalized, highly theoretical, erudite, and mechanized — in short, ‘scientific’ — statements about the strange and very complex workings of our mind’ (Bettelheim 1983, 5). Bettelheim seems to assume that a close examination of Freud’s German is necessary to detect the translators’ scientific strategy, but the fact is that his point can be demonstrated with no more than a careful reading of the English text. Bettelheim argues, for example, that in *The Psychology of Everyday Life* (1960), the term ‘parapraxis’ reveals the scientism of the translation because it is used to render a rather simple German word, *Fehresitungen*, which Bettelheim himself prefers to translate as ‘fault achievement’. (Venuti 1996, 25)

In this case, both the generic and specific views of the translating institution are supported. Specifically, the translating institution could be viewed in a very broad sense as the American admiration for science. It could also be the various psychoanalytic associations which sponsored the Freud translations.

Additional evidence of the existence of a translating institution can be found in the translations of Aristophanes' *Lysistrata* (Lefevere 1992, 41-58), where many sexual references were removed in certain translations because they were unacceptable to the target culture. Yet more evidence is found in the various changes made in the translation of Anne Frank's diary (Lefevere 1992, 59-72), where her words were greatly changed, both to portray her as a 'proper young lady' and, especially when translated into German, to remove unflattering comments and remarks about Germans. When referring to these two examples, Lefevere also speaks of the "constraints of patronage", stating that the person/institution paying for the translation frequently does request and make changes (Lefevere 1992, 59-72). Basically, these examples reveal two elements of translation — cultural and economic influence — which could both be the result of the translating institution. Although much discussion of translation has focussed on the traditional faithful/free dichotomy, such a dichotomy is not really relevant. Whether translations are faithful or not they still get published and translated texts can tell us much about the interaction of cultures and the manipulation of texts. This information is possibly of more interest to the world at large than opinions as to whether a word has been translated properly or not (Lefevere 1992, 51). Yet, I would like to make it clear that there is a fundamental difference between isolated mistakes (which are just that) and repeated

series of mistakes which can point to an expression of translation strategy, wherein one strategy is preferred over another. The examples provided by both Bettelheim and Lefevere cannot be considered haphazard errors on the part of the translator but rather as deliberate changes made, of course by an individual translator, but also more importantly out of respect for the goals of the translating institution. Although Bettelheim criticizes the Freud translations for their poor quality it would be more accurate for him to say that it is not the actual translation he disapproves of, but rather the goals of the translating institution.

Second, Bettelheim does refer to the institutional purpose of creating a 'science of psychoanalysis' (p. 32), but appears to deem this irrelevant to the question of what constitutes mistranslation. His argument seems to be that changing the level of language is *by definition* mistranslation. This is problematic because it suggests that translating could somehow be carried on in some pure state uncontaminated by the goals of translating institutions. But if we agree that it cannot, does it follow that we cannot make a judgment about the translation of Freud? No, it simply means that what has to be judged is the institutional goal itself. (Mossop, no date)

Necessity for Studying the Translating Institution

Since a large portion of the translation work done in Canada takes place in a government or corporate setting, the translating institution is an important factor in how it is done. Mossop makes some very strong claims about the need to study the translating institution. First, he points out that although it is impossible to preserve the entire meaning of a text in the translation process, the decision as to what is relevant and needs to be maintained is not made by the translator as an individual but by the translator as a representative of the translating institution and "that this decision ultimately rests on the

purpose of the translating institution and *that* is determined by the translating institution.” (Mossop, 1990, 351). Second, he claims that the translating institution is also likely to be a more decisive factor in the adaptation process than either the nature of the particular text or the nature of the audience (Mossop, 1990, 351). Third, he states that the translating institution is not a part of either the target or the source culture, but rather responsive to the various cultures that make up society and that this will affect the approaches it takes with respect to language preservation and promotion. (Mossop 1990, 351). Fourth, he also says that the translating institution must take the reader of its translations into consideration if its translation goals are to succeed (Mossop 1990., 351). Finally, additional research into concepts such as the translating institution is necessary since, despite the fact that translation theory has become increasingly sociolinguistic in nature in recent years, much of the research has been insufficient (Mossop 1990, 351).

One element the authors cited share with respect to their references to what Mossop has identified as the “translating institution” is their belief that it is not a matter of producing a faithful or free, right or wrong translation, that a number of translation strategies are possible, depending on the goals of the translation institution and that it is these strategies, and not the translations themselves, which must be judged. This requires an understanding of the concept of translation strategy.

Translation Strategy

In everyday usage, strategy is regarded as “a careful plan or method” (Webster’s New Collegiate Dictionary 1980, 1141). Yet, researchers writing about corporate

strategy have developed more refined, complex definitions of strategy. Over the past twenty-five years, the concept of corporate strategy has generated increased interest and has gained increased recognition in management literature (Miles & Snow 1978, ix). Competition is at the core of the success or failure of firms (Porter 1981, 1) and many managers look to ‘strategy’ to account for such successes, in the apparent belief that companies with ‘strategies’ do better than those without.

According to Michael Porter, “competitive advantage is at the heart of a firm’s performance” (Porter 1985, xv) and all industries face the same basic forces of competition (Porter 1991, 90): the character of the rivalry among the competitors; the threat of new entrants; the threat of substitute products or services; and the bargaining power of suppliers (which determines both how much they can force up the price of what a given company has to buy and how much leeway that company has in its own pricing). Managers apparently believe that a good ‘strategy’ will help firms meet the challenges of these competitive forces successfully. Furthermore, many people seem to believe that when a company is going through ups and downs, a ‘strategy’ will see them through their difficulties (Diftenbach 1987, 17).

Defining Strategy

In the most basic terms, strategy can be defined as a “very specific plan of action directed at a specified result within a specified period of time” (Andrews 1980, vi). Along these lines, some authors perceive strategy as a plan to take a firm from here to

some way out into the future (Foster 1989, 74) and the usual idea of good strategic behaviour is that the plan should be followed and the intention realized.

Mintzberg provides the most in-depth explanation, refusing to rely on a single definition of strategy (Mintzberg 1987, 11) and preferring a five-fold definition: strategy as plan, ploy, pattern, position and perspective.

When Mintzberg refers to 'strategy as plan' (his first definition) he refers to a course of action, a guideline (or a set of guidelines) to deal with a situation. His concept of strategy as a ploy (his second definition) is quite similar since he refers to ploy as a specific 'manoeuvre' intended to outwit an opponent or competitor. When Mintzberg refers to strategy as a pattern (his third definition), he refers to it as a pattern in a stream of actions, or a consistency in behaviour, whether intended or not. His fourth definition, 'strategy as a position' refers to locating an organization in an 'environment'. With this definition, he looks outside the firm. Finally, his fifth definition, 'strategy as a perspective', looks inside the company and refers to an ingrained way of perceiving the world. Mintzberg, with his five definitions, covers all aspects of strategy, internal and external, plan and pattern. He also gives equal importance to all five.

While various relations exist among the different definitions, no one relationship, nor any single definition for that matter, takes precedence over the others. In some ways, these definitions compete (in that they can substitute for each other) but in perhaps more important ways, they complement. Not all plans become patterns nor are all patterns that develop planned; some ploys are less than positions, while other strategies are more than positions yet less than perspectives. Each definition adds important elements to our understanding of strategy, indeed encourages us to address fundamental questions about organizations in general. (Mintzberg 1987, 15)

Furthermore, Mintzberg has a two-tiered way of classifying strategies. First, he defines two different types of strategy, using ‘intent’ as his grounds for differentiation. Thus, he defines ‘deliberate’ strategies as those which are “realized as intended” and he defines ‘emergent’ strategies as “patterns or consistencies realized despite, or in the absence of, intentions” (Mintzberg 1985, 257).

Defining Strategy in Terms of Translation

Mintzberg’s view of strategy can be applied to Mossop’s translating institution in several respects. Translation strategy can definitely be perceived as a plan on the part of the translating institution, imposed on translators through an insistence on the respect of certain guidelines and the use of specific dictionaries and style manuals. It can be considered a specific ploy on the part of a specific translator to translate in a certain manner. It can also be viewed as a pattern, a consistency in translation style and techniques imposed through the translator-revisor hierarchy and the revision process. It is a position, with the translating institution grounded in the language management policies of the surrounding environment. Finally, it can be considered in terms of perspective, an ingrained way in which the translating institution approaches translation. Similarly, translation strategy can be either deliberate or emergent — deliberate in the sense, once again, that translators are given guidelines to follow and emergent in the sense that translation strategy is passed on from senior to more junior translators through the revision process.

Dichotomous View of Translation Strategy

Very little discussion in translation theory has focussed on the actual concept of 'translation strategy'. Although translators have frequently commented on their work, the focus has seemed to be on 'good' versus 'bad' translation or 'correct' versus 'incorrect' translation. Much of this discussion has focussed on translation equivalence, concentrating on the dichotomy of letter versus spirit, word-for-word translation versus sense-for-sense translation, literal versus free translation, translating the word versus translating the idea, and translating the sense versus translating the style. In recent times, translators such as Eugene Nida have used expressions such as 'formal equivalence' to refer to the translation of the message itself and 'dynamic equivalence' to refer to the effect which the translated message has on the person receiving the message. All of this discussion has focussed on an attempt to determine which translations were good and which were not. It would appear that, depending on the period in which a translation was produced and the standards of the time, one form or another was generally acceptable. Although much of this discussion would appear to imply that only one form of translation will produce 'adequate' or 'accurate' translations, to me the very concept of 'translation strategy' focusses on the multiplicity of choices available to the translator in the process of translation⁶ and has nothing to do with the accuracy or inaccuracy of the translation.

⁶ By 'multiplicity of choices', I am referring to the choices the translator has to make with respect to terminology, style, tone, level of language, etc.

Domestication versus Foreignization as Translation Strategy

Venuti (Venuti 1996) is one theorist who specifically refers to 'translation strategy' in those words. Yet Venuti adds yet another dichotomous view of strategy, 'domesticating' versus 'foreignizing' translation. To Venuti, domesticating a translation involves bringing translation into the target language and culture and adapting it to fit into that culture, while a foreignized translation is one which retains source language traits (terminology, syntax, and so on).

The differences between domesticating and foreignizing translation were also raised by Antoine Berman (Berman, 1984) in his discussion of the works and theories of various German authors writing in the Romantic period (Berman 1984, 279) such as Schleiermacher, Herder, Holderlin, Novalis, Goethe, Humboldt and the Schlegel brothers. Berman's comparison of translation in Germany and France is of particular interest. He states on several occasions that German authors believed that German culture could develop and grow through an openness to contact with foreign cultures and an influx of foreign languages whereas the French appear to have believed that their culture had to develop through the integration of "others". These two different attitudes towards intercultural contact and translation (the French and the German) also affected the way in which translation was performed and the debate concerning fidelity. For instance, Berman states that French translators appeared to take far greater liberties with texts during that period, re-writing them to make them 'more French', partly as a result of the dominant position of French culture at the time (Berman 1984, 62). Obviously, the entire translation process must be more or less invisible in a culture/country which either does

not approve of ‘others’ or feels superior to them whereas, in the German tradition (at least according to Berman), translation has been much more accepted and even incorporated into that nation’s literature and culture.

Domesticated translation is the result of what Venuti terms “fluent” translation, or translation which reads as an original.

A fluent translation is written in English that is current (“modern”), instead of archaic, that is widely used instead of specialized (“jargonization”), and that is standard instead of colloquial (“slangy”). Foreign words (“pidgin”) are avoided, as are Britishisms in American translations and Americanisms in British translations. Fluency also depends on syntax that is not so ‘faithful’ to the foreign text as to be ‘not quite idiomatic’, that unfolds continuously and easily (not ‘doughy’) to insure semantic ‘precision’ with some rhythmic definition, a sense of closure (not a ‘dull thud’). A fluent translation is immediately recognizable and intelligible, ‘familiarized’, ‘domesticated’ not ‘disconcerting[ly]’ foreign, capable of giving the reader unobstructed ‘access to great thoughts’, to what is ‘present in the original’. Under the regime of fluent translating, the translator works to make his or her work ‘invisible’, producing the illusory effect of transparency that simultaneously masks its status as an illusion: the translated text seems ‘natural’, i.e., not translated. (Venuti 1996 5)

“Fluent” or “idiomatic” translation is precisely the style of translation promoted by Jean Delisle in his works on teaching translation of pragmatic texts (Delisle, 1988; Delisle, 1993). A would-be translator does not necessarily have to be fully bilingual, requiring primarily an excellent passive knowledge of the source language, combined with an excellent active knowledge of the target language. At the same time, bilingualism does not necessarily guarantee competence as a translator. Defining translation as a skill (of interpretation and re-expression) based on knowledge (of language and facts), Delisle describes both the types of skills a translator needs and the

type of work involved in translating. In his interpretative approach to translation, Delisle focusses on translation as an idiomatic (or fluent) re-writing or re-expression of the author's thoughts.⁷ Delisle would appear to believe that domesticating translation strategies are preferable, with the goal of such strategies being transparency⁸ and, as Venuti argues, in the case of most translation and specifically in the case of translation into English, the strategy of domesticating, fluent translation would appear to be the strategy which has been judged correct and has prevailed over foreignizing translation strategies. (Venuti 1995)

A translated text, whether prose or poetry, fiction or nonfiction, is judged acceptable by most publishers, reviewers, and readers when it reads fluently, when the absence of any linguistic or stylistic peculiarities makes it seem transparent, giving the appearance that it reflects the foreign writer's personality or intention or the essential meaning of the foreign text — the appearance, in other words that the translation is not in fact a translation, but the original. (Venuti 1996, 1)

One effect of a domesticating translation strategy is that the translator becomes invisible. Another is that both the source language and the source culture also become invisible. Venuti appears to believe that, in the case of Anglo-American translation, this

⁷ Delisle (Delisle 1993, 33) defines idiomatic translation as follows: "Conforme à la démarche générale d'une langue, à l'usage, aux habitudes d'expression spontanée de ceux qui la parle et dont c'est la langue maternelle. Note : Traduire idiomatiquement c'est tenir compte à la fois des servitudes de la LA, de ses tendances générales et de ses possibilités. Ainsi, l'énoncé *«He's just a friend, not a boyfriend»* signifie littéralement : «Ce n'est qu'un ami, il n'est pas mon ami de coeur [traduction transcodée]. Il est plus probable, cependant, qu'une locutrice de langue française s'exprimant spontanément dise : «C'est un ami, sans plus» [traduction idiomatique].

⁸ "I see translation as the attempt to produce a text so transparent that it does not seem to be translated. A good translation is like a pane of glass. You only notice that it's there when there are little imperfections — scratches, bubbles. Ideally, there shouldn't be any. It should never call attention to itself." — Norman Shapiro (Venuti 1995, 1)

second effect is a direct result of the ethnocentrism and imperialism of Anglophones, going so far as to refer to it as violence (Venuti 1996, 25) . This attitude, in my opinion, still exists today, particularly with respect to translations made for the American public. Take, for instance, the movie “Three Men and a Baby”. This movie was the American remake of a French film. The cultural imperialism of the US makes this type of remake necessary since Americans do not like to see movies or read books with a ‘foreign’ flavour.

Closer to home, another, more extreme, example of domestication is evident in the manner in which advertising is handled for the Quebec market. It is generally accepted that Quebec consumers form a distinct consumer market and it is very interesting to note that ads in Quebec are quite distinct⁹. It would appear that successful ads in Quebec are not actually translated, but made specifically for the Quebec market. And those companies which do produce different ads for the French-speaking Quebec market have found this technique very beneficial.¹⁰

⁹ For example, Bell Canada ran an ad in English Canada in 1992, showing whales singing under water and wolves howling to each other in the wilderness. According to Raynald Petit, Bell’s Quebec Advertising and Promotion Director, English Canadians loved it, but the ad bombed in Quebec (Martel 1992, 9). The French ad for Quebec was quite different; it showed a handsome man in a telephone booth whistling a lullaby to his daughter.

¹⁰ For instance, Pepsi’s campaign was so successful that the firm ran three series of commercials. More important, since Meunier became Pepsi’s spokesman, Pepsi, which once trailed Coke in sales, went on to outsell that brand two to one and Quebec is Pepsi’s most successful province in Canada (Chiasson 1987, 21). Furthermore, a consumer survey conducted by Processus Marketing in 1989 and 1990 revealed that Quebecers remember advertising that is produced in Quebec better than advertising produced outside Quebec (Chiasson 1990, 6). Message recall scores ranged from 74% to 75% for TV spots created specifically for French-language viewers as compared to 11% to 17% for messages brought in from outside Quebec and dubbed into French (Sales and Marketing Manager Canada 1991, 16). Finally, one of the most identifiable slogans in Quebec advertising history was made in Quebec and appealed to feelings of Quebec nationalism: Labatt’s “On est six millions” is recognized by 94% of Quebec consumers (Bouchard 1978, 143).

In the case of the translation of Quebec literature into English, domestication or fluency would once again appear to be the dominant strategy. Yet, when discussing their work, translators such as Phillip Stratford, Susanne de Lotbinière-Harwood, David Homel, Linda Gaboriau, Ray Ellenwood, Kathy Mezei, Betty Bednarski and Jane Brierly (Simon 1995) appear to view translation strategy as a variety of choices available to the translator, not as an either/or situation. Not only is the decision to domesticate or foreignize an option, but also the degree to which either is done. And they also agree that it is the purpose underlying the translation which also determines the strategy. For instance, in the case of the translation of Quebec literature, while translation is used to promote both Quebec and its literature, the translation strategy will reflect different points of view with respect to the linguistic and cultural differences between French- and English-Canadians. For instance, while commenting on William Hume Blake's and Charles G.D. Roberts' translations of *Les Anciens Canadiens* by Philippe-Joseph Aubert de Gaspé, Sherry Simon writes:

Blake's and Roberts' work stand at opposite poles of the translation spectrum. Both used their work to promote French Canada and its literature — but their strategies reflect differing ideas about linguistic and cultural difference. Blake accentuated these differences, while Roberts attempted to eliminate them. Which solution have subsequent translators preferred? (Simon 1995, 14)

As always, when determining their translation strategy, translators must determine where their loyalty lies —to the original author, to the target audience, to the translating

institution or to some combination of all these.¹¹ On the one hand, Betty Bednarski describes the difficulty of determining loyalty as being pulled between author and reader.

The translator is obliged to look ahead — more consciously, perhaps, than any other writer — to the reception of the text. Responsibility to a reader is always explicit, always in the forefront of the translator's mind, and may at times appear to conflict with an equally explicit sense of duty to the author and the original text; which explains the impression I have of being pulled toward both author and reader, in two different directions at the same time (though such oppositions can in fact only partially account for the complex network of responsibility and communication translation sets up). (Simon 1995, 121)

On the other hand, theatre translator Linda Gaboriau emphatically states that her loyalty lies with the author (Simon 1995, 83). This has caused her to adopt a strategy which maintains the foreign flavour, despite the fact that this may make it somewhat less acceptable to the target audience.

¹¹ This raises the whole issue of the stakeholder and whether translators should adopt a stakeholder approach in their work. Marketers, advertisers and salespeople are keenly aware of the fact that different market segments and different stakeholders must be targeted in different manners. For instance, as part of my professional work, I conducted a number of interviews in 1994 and 1995 with Chris Viehbacher, President of Burroughs Wellcome Canada (before the Glaxo takeover in March 1995), as well as various other senior executives of the firm. All of them repeatedly told me that the situation of pharmaceutical firms is changing dramatically. In the past, prescription drugs were marketed primarily to medical professionals such as doctors and pharmacists. Now, however, as a result of regulatory changes and certain economic factors such as the desire to cut government spending and deficits and the fact that over 60% of all prescription medication purchased is paid for either by the government (in the case of pensioners, welfare recipients, and so on) or insurance plans, the parties paying for the drugs want more and more say in whether ethical or generic drugs are to be purchased and are tightening their control with respect to prices. At the same time, patients are becoming increasingly active in their own treatments and are also demanding input as to the type of drugs they will use and whether or not they will even use drugs. This is particularly obvious in the case of HIV-positive and AIDS patients, where patient advocacy groups have assumed a significant role in the choice of therapy and drugs used. As a result of these changes, the pharmaceutical companies are having to market to two new segments (the payer and the user) and, obviously find the techniques they use are very different than those they have used in the past with respect to medical professionals. Other industries are also having to deal with other market segments. For instance, the *Journal of Consumer Marketing* and the *Journal of Advertising Research* have carried articles about targeting the homosexual population (Fugatt 1993), Evangelical Christians (McDaniel 1991), and the growing Hispanic population in the US (Albonetti 1989) - because of their growing numbers and increasing spending power.

Having made the choice to represent the originality of the artist, my filtering of the text is minimal. But I realized that in some cases, like the Jovette Marchessault play, it might have been more appropriate for me to have rewritten the dialogue in a more conversational tone. But then the audience would not have heard how Jovette Marchessault chooses to write for the theatre in Quebec today. They would not have seen, through Jovette Marchessault's work, a tradition going back to Racine, a theatre style nourished by classical rhetoric and lyricism. The audience would have had two-thirds of Jovette's art, although the result might have been a more accessible evening at the theatre. (Simon 1995, 85)

While commenting on his translation of Antonine Maillet's *Pélagie*, Phillip Stratford agrees that his function was not to make her text English, but to put it into English, a strategy which also involves maintaining the foreign style of Maillet's work.

Here I must make an important aside. In the age-old debate between those who swear by strict fidelity and those who demand poetic license in translation, between the near-literalists and free-adaptors, I side with the former. I felt it was not my job to remodel *Pélagie*, but to render it. I like the verb "to english a text"; I do not feel it is my duty to anglicize the books I translate. For me, englishing a text even means allowing some foreign flavour to subsist, so that readers are occasionally reminded that they are reading a translation. Within these limits I had to exercise my own inventiveness, that was the challenge. (Simon 1995, 96)

And yet Ray Ellenwood states that, despite his personal preferences, this foreignizing strategy is not generally accepted here in Canada by publishers (Simon 1995, 104), citing a clear example of how a translating institution determines translation strategy. He is supported in both his perception of this dominant translation strategy and his attribution of it to a translating institution by Kathy Mezei who, in her discussion of how translators deal with words which are in English in a text by an Quebec author, further sees it as a result of the cultural imperialism of English Canada and the further assimilation of French Canada.

What then is the significance of this non- or mis-translation of English by so many skilled translators? I think there are two ways of answering this question. First, in several cases, translators like David Homel, Sheila Fischman, and Betty Bednarski are thinking of their readers. Their focus and desire are directed towards creating a readable and pleasurable text for the English reader. Given their understanding of the Quebec milieu and authors, they are skilfully able to transpose the source text on a semantic and syntactic level into the target text. Their orientation (over the last few years) has primarily been towards the production of meaning at the target text, though they themselves have “interpreted” the original text within its cultural context. Finding certain aspects (e.g., *joual*) culturally untranslatable, they have deferred to the target text and produced meaning for their readers. Furthermore, it is not always the translator, but sometimes the editor — the literary institution — who privileges the referential system of the target text. Unfortunately, one of the consequences of this kind of readability is often the subtle diglossia that results. The Quebec text becomes assimilated into English-Canadian literature. (Simon 1995, 145)

Finally, in discussing his translations of Dany Laferrière’s *Comment faire l’amour avec un Nègre sans se fatiguer*, David Homel sums up the true strategy pursued by most translators, regardless of their language combination, geographical location or place in time:

...I had the rare and delicious opportunity to do what all translators secretly want to do: outwrite the work, outdo it, *be better than the original*, the attempt at which is the duty of all translators. (Simon 1995, 49)

The Translation Strategy of the Federal government as a Translating Institution

While authors such as de Lotbinière-Harwood, Toury, Gentzler and Lefevere make only rather vague references to what might or might not be accepted as a “translating institution”, albeit an unidentified one, Mossop refers specifically to the concept in those terms and writes specifically about the federal government of Canada.

He claims that federal government currently promotes a “communicative, target-language oriented approach to translation as the right way to translate” (Mossop 1987, 17).

Specifically, he states that the translation norm for those working for the federal government is “idiomatic translation” (Mossop 1990, 346). In other words, the translator’s goal is to “translate the ideas, not the words”. This would appear to tie in with what Venuti and Delisle promote as “fluent” or “domesticating” translation strategy. There is no question that this is the dominant approach to translation in Canada. It is the approach I was taught in university, it is the approach promoted in Delisle’s teaching manuals (Delisle, 1988; Delisle, 1993), and it is basically the approach I teach now.

Mossop attributes this communicative approach to translation to the federal government’s policies of administrative bilingualism and the responsibilities it has assumed under its official languages legislation . As I pointed out earlier, English has been overwhelmingly the translated language here in Canada, with French the translating language. As a result, the federal government’s approach to translation was developed basically for English to French translation. It is, however, also used for French to English translation since translators working in that direction are the product of the same schools and universities and are largely in the minority within those institutions. For instance, when I studied for my B.A. in translation the Université de Montréal only four anglophones (out of a total of 120 students) started the program (with two completing it) it, while only ten Canadian anglophones¹² were in the M.A. programme, which offered an

¹² Namely only ten individuals could remain in Canada to work at the end of their studies.

option in French-to-English translation. Furthermore, French to English translators working in translating institutions are also in the minority.

Translation under the federal government has served several functions. First of all, successive governments since the 1960s have upheld the government's decision to promote official bilingualism while preserving individual rights to equality in unilingualism. As a result, translation has served as linguistic bridge between English- and French-speaking Canadians. Second, the initial focus of English-French translation was the preservation of an authentic French voice. When Mossop wrote his articles in the 1980s, much of the material Quebecers read was translation and not original writing. Idiomatic translation was used to ensure the survival of French as an instrument of cultural identity and political survival. Furthermore, for French language professionals the distinction between translation and original was often blurred. Third, starting in the 1960s, large numbers of French-speaking Canadians went to work for the federal government and various federal institutions. Under the government's language legislation, they were entitled to work in their mother tongue and translation was required to make the documents they wrote available in English. In this case, French-English translation served as a substitute for second language training for Anglophones while helping to preserve French. A final function has been the masking of the source culture and the preventing of contact between the two cultures. For instance, while English-French idiomatic translations convey messages from English Canada, they do not convey information about English Canada and English Canadians. It is also true that French-English idiomatic translations do not convey information about Quebec. By way of

example, Mossop discusses the translation of a memo from Quebec on acid rain. In an idiomatic translation, the message is rendered accurately, but any evidence of the origins or language of the original author are lost.

Consider that memo from Québec on acid rain. When I translate it 'communicatively', the technical-administrative message gets through to Mary Smith in Toronto, but the community affiliation of the author is not deemed 'pertinent' information' and is lost; there is no mark of it other than the signature at the end. The French presence in the public service, and indeed in Canada, is thus not evoked in Mary's mind as the translation is read. (Mossop 1988, 68)

I have encountered similar situations on many occasions in my work as a professional translator. For instance, while working for CP Rail, I frequently translated statements given by employees during investigations into their alleged violation of company rules and regulations. One such statement concerned an incident in which a French-speaking employee swore at his English-speaking foreman. In the translation, we replaced all of his very colourful, extremely personal, very typically Quebec expressions with relatively standard English ones. We made the employee sound like an average English-speaking Canadian. As a result of the federal government's focus on idiomatic translation, any cultural differences are set aside and English and French-Canadians are portrayed as essentially the same. This is the paradox of idiomatic translation. While it has served to promote communication, enabling Francophone civil servants to work in their own language and still get their messages across to their Anglophone co-workers, it also hinders communication because it makes the Francophone presence vanish. As Mossop wrote, "Once again, as so often in Canadian history, the two solitudes fail to touch." (Mossop undated). To sum up, although idiomatic translation would appear to be correct,

providing texts of excellent quality in the target language and avoiding translation errors, it does convey an institutional meaning. In the case of the translation done under the auspices of the federal government, it conveys the idea that English and French Canadians are basically the same.

Texts as Revealing Strategy

If we then accept the existence of a translating institution having a specific translation strategy, we next need to determine if there is any basis for the argument that translations produced by a translating institution reveal the translation strategy. Once again, significant research has been done in the field of management on the extent to which corporate documents can reveal corporate strategy.

It is rather generally agreed that an information explosion is underway and that most of us are being constantly bombarded with information that we have to interpret and weigh. Not all of this information is explicit; in fact, much of it is implicit. Kets de Vries likens us all to detectives, much like Sherlock Homes, who have to decode the meanings contained in this barrage of information to uncover what is going on in the world (Kets de Vries 1987, 23).

Companies do not passively wait for events to occur and forces within their industry to affect them; they actively intrude into their environment (Fombrun 1990, 252) and overtly try to control it. Organizations are also great disseminators of information. They produce enormous quantities of organizational texts: ads, brochures, annual reports, internal memos, internal and external correspondence, and so on. One way in which we

can uncover what they are doing or intend to be doing (namely, their strategy) is by analyzing the various statements made by their managers in the various documents in which they present themselves to the world.

In studying organizations we can 'interpret their texts' through the analysis of managerial statements, writings and observable behaviour... The text implicit in a specific strategic decision, or the choice of a particular interpersonal style or type of organizational structure can also be scrutinized. It is useful to be alert to the underlying themes, the meanings behind the metaphors of managers, the reasons for the selection of certain words and the implication of certain activities... This can help scholars and managers to recognize the crucial orientations and assumptions that influence organizational culture, strategy and structure; an important step towards understanding, diagnosis and intervention (Kets de Vries 1987, 234).

The narrative portions of annual reports can be of particular assistance in helping uncover corporate intentions and strategy. First, annual reports are public documents and are widely disseminated. For this reason, the narrative material contained in annual reports is much more accessible for analysis than internal documents such as memos, minutes, or correspondence. Second, annual reports appear at regular, pre-determined intervals and cover both performance information and forecasts for set periods of time. Third, it can be safely assumed that the voice behind the narrative portion of a corporate annual report is that of the corporation's management. Specifically, although an annual report may be prepared by a group of individuals, or even by individuals who are not company employees (as in the case of freelance writers), it is traditionally signed by one of the corporation's senior executives, usually the CEO or the Chairman. For example, in the case of CN's annual report, it is signed by both the CEO and the chairman and it is

the chairman who submits the report to the shareholders¹³ for approval. It is assumed that these officers have some say over the content of the documents they sign. Therefore, it is arguable that they are organizational rather than individual communications (Staw 1983, 585), much as in the case of a company logo.

Once the logo is in the public domain, it has its own currency and value. The logo analogy for the annual report works well because it also effectively addresses the question of authorship. Many have noted that if the annual report is not written by the CEO or the top management team, what is its value or verisimilitude as a surrogate for their perception and actions. Once a logo is adopted, it becomes intimately and inextricably linked with a product and usually a firm. It is of little consequence which artist or advertising firm first conceived the logo. This is also true of the annual report. Irrespective of its authorship this document comes to symbolize and embody the top management team's interpretations of firm activities, intentions and behaviours, past, present and future. (Kelly 1996, 66)

Fourth, it can be safely assumed that the information provided in the narrative portion of a corporate annual report is also accurate. Once again, these reports are signed by corporate officers who are held responsible for their accuracy. Moreover, although the narrative portion of such reports is not formally audited in the same manner that financial statements are, it does nevertheless come under a great deal of public scrutiny and there could be serious consequences if it were found to be inaccurate.

Although the financial statements contained in annual reports have long been held to convey important information, the narrative portions have frequently been criticized as hype and 'fluff'. They do, in fact, reveal much more than most people would expect

¹³ Until 1996, the Government of Canada was CN's sole shareholder. Now, a percentage of the company's shares are traded publicly.

(Bowman 1978, 64). The narrative portion of an annual report is both multi-purpose (selling both product and image) and multi-audience (Anderson 1992, 114), being addressed to a wide number and variety of readers, including investors, potential customers, institutional investors, professional analysts, interested public, bankers, financial reporters, unions (members and leaders), suppliers, prospective buyers, consumer groups, prospective merger or acquisition candidates, employees, individual investors (Anderson 1992, 113).

The annual report works as a metaphorical snapshot, a frozen moment in time, so -to-speak (sic), that encapsulates management's view of the past, present and future. Thus, they are an excellent source of data that provides a heightened historical perspective (Kelly 1996, 20)

Content analysis has been used in several empirical studies recently (D'Aveni 1990, 640) and this empirical data supports the use of annual report data in analyzing organizational phenomenon (Bettman 1983, 165). Bowman conducted several studies in the 70s and 80s, looking at corporate strategy (Bowman 1978; Bowman 1975), risk (Bowman 1984), and social impact disclosure (Bowman & Haire 1976) as revealed through the narrative portions of annual reports. Abdeen has looked at social responsibility disclosure in annual reports (Abdeen 1991). Bettman and Weitz (Bettman 1983) and Staw, McKechnie and Puffer (Staw 1983) have all looked at casual justification of corporate behaviour as revealed through annual report narrative. And D'Aveni and MacMillan (D'Aveni 1990) have looked at how top managers behave in times of crisis, also as revealed through annual reports. Along similar lines, Anderson and Imperia have looked at male and female portrayals in annual report photographs

(Anderson 1992). These studies have all demonstrated that textual or narrative portion of annual reports can be very revealing.

Bowman argues that annual reports reveal a great deal more about corporate strategy than most managers recognize. Business researchers, market analysts and consultants can be added to the list of those who could benefit from a closer look. Annual reports supply much useful qualitative information. They contain much written material and images that let the researcher do a thorough content analysis. It is not just what is said, but what is not said that is of interest. (Kelly 1996, 23)

An Example of Texts Revealing Strategy

In an effort to determine whether there are patterns in the language (text) of corporate annual reports and whether these patterns reflect aspects of organizational character and types of strategies pursued as well as period of organizational change and transition or renewal and, finally, whether similarities and differences in the content and use of language reflect organizational character, strategic themes, management's world view and decision approach, as well as change points in the firm's life cycle, Kelly (Kelly 1996) conducted an in-depth context analysis of annual reports produced by five computer firms. Kelly used a corpus of twelve years of annual reports produced by IBM, Texas Instruments, Hewlett Packard, Digital and Apple computers. After first determining the sampling unit (the letter to the shareholder portion of the corporate annual report), Kelly determined the recording unit (words of text as to text as lines, words and causal statements). She then determined 17 themes to be analyzed, categorizing them in three categories as follows: external (economy, competition, demand, industry, global); internal (efficiency, innovation, product design, finance and

accounting, marketing, organizational structure, and human resource management); and character (proactive, intuitive, planning, pessimistic, and optimistic). Then, after scanning the documentation into an electronic format, she used a software known as Hyperresearch to code the texts, using the programme's autocoding feature to count the instances of key words in each letter and tabulating totals for each firm (Kelly 1996, 71). Kelly also collected secondary data through an analysis of business press accounts obtained through the Lexis-Nexis on-line data base for a second content analysis (Kelly 1996, 73). Kelly's investigation led her to identify various discernable patterns in the text of annual reports, both for the computer industry as a whole and for the respective firms studied. She found that within the company the pattern pertains to the company's persona as well as to the character of both the firm and the individual who founded the firm. She also concluded that the industry life cycle follows a pattern of growth, maturity and a return to growth, with this pattern also applying to the firms studied. She provides a systematic, longitudinal portrait of strategy and character in the computer industry, concluding that despite the fact that her study uses only one principal instrument and one secondary source it does reveal the usefulness of corporate documents in inferring corporate strategy.

Furthermore, this pattern has a correspondence to the events in the firms' year. Also, there is a relationship between the stage of development of the firm and this text. So, this research has laid the groundwork to allow for studies to use the tools of content analysis and corporate document to infer strategy. This findings of this present research is that the annual report is an excellent instrument for studying corporate strategy. (...) One can infer a firm's present strategy and also have a means to infer the direction the firm intends to pursue in the future. (Kelly 1996, 229)

Kelly's thesis demonstrates how a corpus can reveal management or business strategy. This management concept, as well, can be applied to translation and translation strategy. Specifically, in much the same way that corporate documents can reveal information about corporations which is not specifically stated, translations can reveal much about translation environment, translating institution and translation strategy, which is not specifically stated.

Summing Up

Three very basic concepts/notions ground this study: translation environment (the context in which translation is done), translating institution (the organization which employs the translators) and translation strategy (the manner in which translation is done). In the most general terms, the translation environment in question is characterized particularly by the language management plan of the Federal government (since Canadian National is a federal Crown corporation which is regulated under the *Official Languages Act*) and to a certain extent by the language management policies/plans of the Quebec government; the translating institution is CN's Linguistic Services department and the translating strategy is to produce high quality idiomatic translations. By shifting the focus from questions of whether translations are good or not, to what translations can reveal, it is to be hoped that more in-depth insight can be gained into the translators who produce the work, the agency for which those individuals work, and the environment in which they work.

PART II

METHODOLOGY

My goal in this study was to document what a corpus of translations can tell us about both the strategies adopted by the translator(s) who produced the translations and the environment in which the translation was produced. I chose a specific corpus of pragmatic texts (employee newspapers/magazines) and their translations produced within a specific translation setting (the Canadian National Railway Company). I will start by discussing the concept of translation corpus and the reason for selecting pragmatic texts. I will then explain my choice of corpus, describe the corpus chosen, and present my research design.

Concept of Translation Corpus

The 'corpus' is a relatively new concept in translation studies and one that is not as yet widespread. Both traditional theories of translation and the scientific/linguistic theories have usually tended to focus on single works and individual translators. Certain proponents of the 'translation studies' school of thought, on the other hand, advocate looking either at a corpus of work or a school of translators. This switch from individual translations and translators mirrors the transition from prescription to descriptive analysis of translations. Hermans is one author who states that translation studies should be descriptive and not prescriptive and that corpora and not individual translations should be

studied. He promotes what he refers to as “descriptive translation studies”. He defines this as:

...not prescriptive. Instead of providing guidelines for the next translation to be made and passing judgment on any number of existing ones, the descriptive method takes the translated text as it is and tries to determine the various factors that may account for its particular nature. (Hermans, 12-13)

Lambert and Van Gorp (Hermans, 1985, 42-53) also promote the idea of studying a corpus, stating that we should avoid an exclusive preoccupation with individual translation and with individual works or their reception. Their object is not to study a single translator or a single translation, but to study translational norms, models, behaviour and systems.

Van den Broeck (Hermans, 1985, 54-61) too believes that translation criticism should not merely be a subjective concern, not merely “error analysis”. He states that he does not care whether a translation is adequate, “correct” or “successful”. He thinks translation description should be concerned with the “hows”, the “whys” and the “wherefores” of translated texts. He states that:

It is one of the foremost tasks of translation criticism to contribute to a greater awareness of norms among all those involved in the production and reception of translations. In his privileged position of a receptor who observes the total communication process (author + source text + source receptor/translator + target text + target receptor) the critic, more than anybody else, is able to realize that translation options are not abstract or immanent but bound to time and place. So of course, are his critical norms. (Hermans, 61)

Other recent translation theorists such as Brisset (Brisset 1990), Lefevere (Lefevere 1992), Toury (Toury 1980), Hermans (Hermans 1985), Gentzler (Gentzler 1993) and Bassnet-McGuire (Bassnet-McGuire 1980) have also preferred to focus on the target rather than the source text and on what the target text can tell us either about a given society at a given time or about the system under which a translation is produced.

Toury (Toury 1980) stated that while translations can be directly observed, the translation process cannot and that a descriptive branch could only be used to deduce the process by observing the product. According to Toury any descriptive research should focus primarily on the target language product because it is the target or recipient culture which 'initiates' the decision to translate and the translation process. He also believes that the goals which the translation is designed to serve are set in and by the receptor system(s) and that translators operate first and foremost in the interest of the target culture and not that of the source text or source culture.

In his work on a small corpus — a single story in multiple translations — Toury set out a process for dealing with a corpus of translated texts. First the texts in the corpus must be regarded as translations. Second, their acceptability as target language texts must be studied. Third, a comparative analysis of the texts must be made to determine how translational phenomena were solved. Fourth, the relationships between the members of each problem+solution pair, must be identified and described. Fifth, these relationships must be referred to the overall translation concept underlying the corpus. Sixth, the nature of the overall prevailing translation concept must be determined.

Finally, the decision-making process involved in the translation process must be reconstructed.

It is Brisset (Brisset 1990), however, who has done the most complete work to date on a corpus — analyzing translated plays, which were performed in Quebec during the same period. Brisset's work is particularly interesting in this respect. She breaks with the traditional 'judgmental' form of translation criticism in which everything is reduced to determining whether the source is 'well translated' or 'poorly translation' and in which everything boils down to how the source text 'should be translated'. For Brisset, the question 'Comment faut-il traduire?' should be reworded 'Dans un état de société, quelles sont les conditions d'exercice de la fonction translatrice?' (Brisset, 24-25). In her pursuit of this goal, she shows how trends in the translation and production of plays were influenced by political events in Quebec between 1968 and 1988: De Gaulle's visit in 1967, the PQ's rise to power, the referendum on sovereignty in 1980, the defeat of the PQ in 1985, the Conservative victory in the federal elections in 1987, and the debate over the Meech Lake Accord. The purpose of her study is to show different approaches to translation and what they can tell us about a given society at a given time. In doing so she has also focussed on groups of works belonging to a single category.

Au lieu de s'en tenir à l'examen d'un texte isolé, comme on le fait d'habitude, elle s'est fixé pour objet d'analyse un ensemble de textes appartenant à une même catégorie de discours et partageant les mêmes coordonnées spatio-temporelles. (Brisset 1990, 318)

Brisset herself describes her corpus as a "double corpus" (Brisset, 35): she studies both translated plays which were published in Quebec between 1968 and 1988 , as well as

translated plays which were performed in Quebec during the same period. She specifically states that she chose the theatre corpus because theatre is the most translated form of literature in Quebec and because there is a direct relationship between the theatre and the society it represents.

D'une part, le théâtre est au Québec le genre le plus traduit. D'autre part, le théâtre est en prise directe sur la société, sur son imaginaire et ses représentations symboliques, le système de ses idées et de ses valeurs... le dialogue de théâtre présente des affinités directes avec le discours de la société... (Brisset 1990, 27)

Brisset concludes that, during the period she studied, plays were translated in such a way as to leave no trace of a foreign character in the target language work, thereby giving the audience the illusion of watching a play set in its own culture and its own environment. According to a critique of her work (Bowen, 10), she points out that the “eternal opposition between the translator serving the author and the translator serving the reader (or the public) is decided by the environment in which the translation works”. Therefore, as a result of rising Quebec nationalism between 1968 and 1988, the original plays had to be reworked in translation in order to reach as many theatre goers as possible. During that period, translators were more concerned with the ways in which the translated works could promote national and linguistic identity than with faithful reproductions of foreign works. At the end of her study, she points out that this situation has changed remarkably in recent years. Now, foreign plays can be enjoyed as such in Quebec and many Quebec plays are performed elsewhere and translated into other languages.

She comments only briefly on the form of translation done in federal institutions. While she sees dramatic translators serving their public, she appears to believe that translators working for federal institutions serve their authors.

First:

Tel est bien l'effet du bilinguisme fédéral qui submerge la collectivité francophone minoritaire de textes qu'on a traduit depuis la langue dominante au lieu de les avoir écrits spontanément en français. (Brisset, 131)

And also:

Il est vrai que la traduction, omniprésente, tend à fondre le français dans la langue dominante. (Brisset, 314)

One theme which recurs throughout Brisset's work is that of 'discours social'. She herself calls her book "... une étude sur les attaches socio-discursives de l'opération traduisante..." (Brisset, 317) and the expression turns up in numerous forms throughout her book. Although Brisset uses the expression "discours social" to refer to a very specific concept with a specific meaning, I believe that it can also be extrapolated to have a broader sense, that of 'environment'. This comes through clearly in her conclusions, as stated above, namely that the translator's purpose in translating is determined by the environment in which she/he translates (the 'translating environment'). Yet these conclusions are only apparent because she worked on a corpus of work, produced by a body of translations, rather than on individual works produced by individual translators.

Pragmatic Translation

The corpora discussed above share a focus on texts of a literary nature. In fact, very little has been written about the translation of pragmatic texts, which Delisle defines as¹:

Type d'écrits servant essentiellement à transmettre une information relevant d'un champ d'expérience particulier et dont l'aspect esthétique n'est pas l'aspect dominant. Note: Par leur nature et leur fonction, ces textes se distinguent des oeuvres littéraires (roman, nouvelle, poème) et des écrits généraux de composition libre (biographie, chroniques, mémoires). Habituellement rédigés en fonction de leurs destinataires et dans une langue de spécialité, ils tendent à la plus grande efficacité et à la meilleure communication possible et ont souvent une application immédiate et relativement éphémère. Cette catégorie de textes représente environ 90% du volume de traduction dans le monde. (Delisle 1993, 47)

Traditional translation theories, linguistic translation theories, and translation studies have all tended to focus on literary works. Some advocates of translation studies have gone so far as to claim that translation theory should be considered part of comparative literary studies. Possibly this has occurred because few translators of non-literary texts have commented on their work.

To sum up: for the purposes of a general translation theory, a sociological framework that sees an unchanged message moving from an individual translator to a set of identical readers in a monolithic culture is just too simple. It is now necessary to move beyond socially empty abstractions, like the 'reader', the 'target culture' and 'the translator', to more concrete approaches that consider the historical (and conflictual) situations in which translations are done and read, with attention to institutions and to the various social groups whose interests are served or not served by those institutions. Only in this way will it be possible to understand why

¹ According to Delisle, pragmatic texts include: advertising material, technical, scientific and journalistic texts, reports, minutes, business correspondence, circulars, administrative or legislative documents, maintenance notices, instructions. (Delisle 1993, 47)

translations have been done and are being done in the way they are rather than in some other way. Students of literary translation have already made some progress in this direction... Now it is necessary for those of us who are primarily concerned with other types of texts to do the same. (Mossop, 1990, 353)

Possibly it is because translations have often been considered as somehow inferior to the original works and their hierarchy has extended to set pragmatic texts somehow below literary texts.

Yet translators of pragmatic texts far outnumber translators of literary texts in most countries. Delisle (Delisle 1988) has focussed his work on the teaching of translation on the translation of pragmatic texts, which he, once again, defines as “texts whose fundamental purpose is to convey information and in which aesthetics are of secondary importance” (Delisle 1988, 8), for that very reason. One very interesting point he raises is that the translation of pragmatic texts is different from that of literary texts partially as a result of the anonymity of the author.

In a pragmatic text, the focus is not on the author’s impressions, as it is in a literary text, but on relatively objective facts. Pragmatic texts are therefore often anonymous, and in many cases, it would be of no use to the translator to know who wrote them. (Delisle 1988, 10)

This anonymity of the author can easily be equated with the traditional anonymity of the translator, particularly as promoted through idiomatic translation.

The language management plans of the Canadian and Québec governments have provided the impetus for the translation of an enormous volume of pragmatic translation, resulting in the existence of an enormous translation corpora and a very large school of

translators working for similar employers, under highly similar conditions. These factors, combined with the fact that the anonymity of the authors of such texts put authors and translators on very similar footings mean that pragmatic translations could well serve as excellent source material in the determination of the existence and nature of translation strategy.

Choice of Corpus

Operating under the language management plan of the Canadian government, Canadian National is a excellent source of translated pragmatic texts. As a Crown corporation², it is obliged under the *Official Languages Act* to produce much of the material it uses internally and almost all of the documents it produces for the public in both official languages. Furthermore, it is required to produce all of the material it gives to its employees in the official language of their choice in areas deemed bilingual under the law. The corpus consists of articles from various employee newspapers and magazines produced by the firm's Public Affairs departments (regional offices and head office). Internal company publications were chosen for this corpus for a variety of reasons. In her thesis on inferring corporate strategy from annual reports, Kelly (Kelly 1996, 32) wrote that "The annual report is one of the best ways for a company to convey personality, strength and results. Further it is one of the most effective expressions of a corporation's identity." Similarly, company newspaper/magazines, which are also public

² Canadian National is Canada's oldest Crown corporation, founded in the 1920s. Although the Government of Canada is still the majority shareholder, the railway was partially privatized in 1996.

and not confidential documents, express a corporation's identity, or at least the public face of a corporation's identity. Kelly (Kelly 1996) also viewed the annual report as a communication tool designed to reach a wide range of stakeholder, in order to provide explanations of corporate strategy or positioning and win support for it.

What the annual report states implicitly to each of its readers can be put in narrative terms: "We want you to support the development of this firm (*protagonist/character*) within this industry (*setting*) moving forward with this strategy (*story line*) engaged in this type of competition (*conflict*) achieving this goal (*meaning or theme*)."

(Kelly 1996, 33)

Although the range of stakeholder for internal company vehicles may be more limited, the employee is a particularly important stakeholder, who can be crucial to a company's success. In recent years, employees have been going through difficult times. For instances, in the 1980s, western countries tried to struggle out of a recession/depression. American and Canadian economies did not do well; there was a great deal of talk about the superiority of Japanese firms; and North American companies were particularly unable to deal with competition, especially from Japan. Cutting the bottom line and increasing productivity were the accepted solutions of the day. Radio and television newscasts frequently told of some company or other that was either closing its doors or laying off employees. The situation does not appear to have changed significantly. In 1998, the ups and downs of global financial markets generated rumours of a global depression and companies are still closing up or laying off employees.³

³

For example, Dominion Bridge closed its doors in the fall of 1998 and CN announced the layoff of 3,000 employees in October 1998 to improve its profitability.

Job reductions have given way to downsizing and downsizing has made room for rightsizing. Regardless of the terminology, it all means that some employees have lost their jobs, others are right now losing their jobs and still others are worried about losing their jobs in the future. It is to be expected that employees are feeling less loyal to their employers and that many of them do not fully support their employer's goals.

As part of their ongoing communications with their employee stakeholders, many companies place a great deal of emphasis on their internal newspapers/magazines, devoting considerable resources in terms of staff and money to producing them. In an effort to determine the reasons for this, I conducted a qualitative survey (Curtis 1994), starting in February 1994, of 13 firms and organizations operating in a variety of fields and industries (railway, accounting, municipal government, public transit, banking, television, telecommunications, sales, and hydro-electricity) in the Montreal area. These organizations included: VIA Rail, the City of Montreal, Price Waterhouse, Société Radio-Canada, CP Rail System, Institute of Canadian Bankers, Teleglobe Canada Inc., Canadian National, Teledirect (Publications Inc.), Royal Bank of Canada, Hydro-Québec, STCUM, and Provigo Distribution Inc. Most of the individuals interviewed confirmed the communication aspect of their role and indicated that the main purpose of their vehicle was to provide information about their organization to the employees: "To support company goals" (Royal Bank); "To inform employees" (VIA Rail); for "Information and reflection" (Hydro-Québec); "To give employees background info as to why things are done, why decisions are made, and on policies" (CN); "To inform employees about programmes, policies, decisions" (City of Montreal); "To inform

employees about company happenings” (CP Rail); “To inform employees, former employees and students about the company and its services” (Price Waterhouse); “To inform employees about company mission, events, projects” (Provigo); “To help employees become familiar with the corporation” (Radio-Canada); “To provide info about company objectives, policies” (STCUM); and “To provide information and fulfill the corporate mission” (Telelobe) . Several also indicated that a secondary purpose was to develop a sense of belonging among the employees, to motivate employees and to recognize employee achievement (CN, City of Montreal, CP Rail, Institute of Canadian Bankers, Provigo, Telelobe). Furthermore, others (CN, Hydro-Québec, Price Waterhouse, Royal Bank, STCUM, VIA) indicated that they were attempting to deal with a perceived lack of communication within their organizations and that most of their employees complained that they did not receive enough information. One of the three CN representatives interviewed was very specific about this lack of communication, stating that information was not getting to the front-line employees and supervisors.

As for the choice of media, the majority of those interviewed in the same survey (Curtis 1994) stated that they had chosen to use a newspaper or magazine because it was the only medium with which they could reach their entire audience (CN, City of Montreal, CP Rail, Hydro-Québec, Institute of Canadian Bankers, Provigo, Radio-Canada, STCUM, VIA). Three different views were provided by the Price Waterhouse representative who stated that she felt that other media, such as electronic media, were not as effective, the Royal Bank representative, who agreed with her, stating that other formats would not have the same impact, and the Teledirect representative who very

honestly admitted that her firm had a newspaper because it had always had a newspaper. Two firms, Teleglobe Canada Inc. And VIA Rail Canada Inc., also gave a second reason: newspapers/magazines are concrete, tangible and more permanent than other media.

That 1994 survey revealed that the matter of reaching out to a very disperse audience was a major problem for the Institute of Canadian Bankers, the Royal Bank, VIA, CN, and CP, which all have employees located across the country, as it also was for Provigo, the City of Montreal, the STCUM, Radio Canada and Hydro-Québec, which had multiple outlets within Quebec. It was also a problem for VIA, CN, CP, Provigo, the City of Montreal, STCUM, Radio-Canada and Hydro-Québec because they all had large numbers of blue-collar employees who did not have offices, fixed work locations, or access to computer technology. These firms all felt a need not only for an internal newspaper/magazine, but for one which was delivered directly to the employees' homes.

Furthermore, the 1994 survey also identified a wide range of issues covered : business, policy and employee issues (CN); re-organizations, election results, activities, City accomplishments, programs, policies, HR information, social material (City of Montreal); business, marketing, world and social issues (CP Rail); information about courses offered, volunteers, teaching technology (Institute of Canadian Bankers); news, objectives, events ,and social news (Provigo); deaths, retirements, nominations, arrivals, departmental news, how various shows are made, holidays, special events and technology (Radio-Canada); “anything as long as it was from an employee point of view” (Royal Bank); retirements, deaths, corporate stories (STCUM); what the company is doing in terms of sponsorship, advances, festivities, sales, service anniversaries, promotions,

human interest stories (Telelobe); and business stories and human interest stories (VIA Rail).

CN employees do have a stake in their firm and, given their numbers, they can be very influential despite ongoing downsizing which has reduced their numbers from over 100,000 in the railway's early years to some 30,000 at the time the vehicles in the corpus were written and, finally, to about 25,000 today.⁴ Moreover, CN's pensioners have always been another stakeholder group which has been very large (over 55,000 at present)⁵ and very vocal. CN's need to communicate with these groups is demonstrated by the fact that, during the period covered by this study, it had two national vehicles, four regional vehicles, and several department vehicles.

Description of Corpus

For this study, I looked at a series of six internal company newspapers/magazines produced by Canadian National. Simply put, I wanted to determine if there is a discernable pattern in the translations of company newspapers and whether these patterns could reflect translation strategy. The corpus was selected to provide as much variety as possible. Since bilingual communication with employees is required only in areas which are designated as bilingual under the official languages act, any vehicles produced in only one language were automatically excluded. As a result, the regional magazines produced for the railway's Western Canada and Great Lakes regions were not studied. The six

⁴ Information provided by Marie-Andrée Vaillancourt and Gilda Martinelli, both of CN.

⁵ Information provided by Marie-Andrée Vaillancourt and Gilda Martinelli, both of CN.

vehicles were chosen to include two national, two regional and two departmental vehicles: *Keeping Track / Au fil du rail* and *Eye on Safety / Prévenir*, both national vehicles; *Rail Lines / Écho Rail* and *The Laurentian / Le Laurentien*, both regional vehicles; and *Inforum*, and *À la Pointe du futur / Point to the Future*, both departmental vehicles. The vehicles were also chosen to include some which were written in English and translated into French (*Keeping Track / Au fil du rail*, *Eye on Safety / Prévenir*, *Rail Lines / Écho Rail*, and *Inforum*) and some which were written in French and translated into English (*The Laurentian / Le Laurentien* and *À la Pointe du futur / Point to the Future*). Although the publication frequency varied for each vehicle (ranging from twice a year to ten times a year), an entire year's issues were studied for each. Unfortunately, for several reasons, it was not possible to study the same year for each vehicle. First, CN was in a high state of flux during the period covered by the corpus and some new vehicles were created while others were abandoned — as a result, not all vehicles were produced for a full year, during the same year. Also, I was personally involved in either writing or translating material⁶ for several of the vehicles analyzed and I have attempted in as much as possible to avoid material which I worked on. Finally, three specific types of articles were selected for study. This was done for several reasons: to reduce the volume of the corpus to manageable proportions; to eliminate articles which contained little significant information (such as articles about retirement parties or about employee hobbies); to eliminate articles which may have been borrowed from other publications (such as

⁶ I worked for CN as the Coordinator - English Translation from May 1989 to May 1991, as a writer from May 1991 to September 1994 and as a freelance employee in charge of safety communications from September 1994 to September 1995, and have freelanced irregularly for them since then.

articles on health and medical issues, advertisements for books of interest to employees, requests for employee support of various non-profitable organizations and causes); and to include only those articles which contained information which CN considered important to communicate to its employees and which were written by professional writers. The three types of articles chosen for this study include management articles (a regular article or column, generally signed by a senior executive but not always written by that individual), editorial articles (generally written by the individual responsible for the vehicle) and feature articles (namely the main article in the vehicle which, in the case of the magazines, was often a series of articles on the main topic for the issue). Not all of the vehicles contained all three types of articles at the same time (a list of the articles analyzed is provided in Appendix I).

Brief Description of Each Vehicle

The vehicles were similar in two respects: their purpose was to communicate information to the employees and the language used was to be as clear and simple as possible, with the education of the target audience being estimated at a Grade 9 level⁷. The vehicles selected also varied in several respects, including source language, target language, purpose, scope, target audience, and format. A brief description of each is provided.

⁷

Based on conversations at the time with Mireille Voyer, Manager of Language Training, at one point there was considerable concern that the education level of many CN employees was much lower than Grade 9. A literacy committee existed for several years to look into literacy levels and determine linguistic guidelines for company publications and training materials. The outcome of this work is not known and the Language Training group at CN has since been outsourced.

Keeping Track /Au fil du rail

This national vehicle, published from 1957 to 1995⁸, was written in English and translated into French. Although it was produced in a variety of formats over the years, at the time of the issues selected for this corpus, it was a 12-page tabloid (8 ½ x 17), printed in two colours (occasionally four), ten times a year (with combined issues in July/August and January/February). It was produced in separate, but identical English and French versions and addressed to all employees (~30,000) and pensioners (~55,000). Its purpose was to communicate information about important business topics, issues such as equity, programmes with a national scope such as the employee assistance programme, and benefits information which applied to all employees. Regular features included a page devoted to issues of concern to pensioners, letters to the editor, an employee commentary page, and a page devoted to employee hobbies, accomplishments or charitable work. During the time covered by the study, there was a regular management column, signed by the president, and there were no editorials. The president's column was written by a professional writer and approved by the president; the main article was written by a professional writer and generally approved by several layers of management. This vehicle won writing awards in 1993 and 1994. This vehicle was translated by a single freelance translator who had previously worked in the company's Linguistic Services department and revised by the head office Public Affairs department employee responsible for the French version of the newspaper.

⁸

Information obtained from Marie-Andrée Vaillancourt, CN employee.

Eye on Safety / Prévenir

This national vehicle, published from 1991 to 1994, was written primarily in English and translated into French. It started as a two-colour brochure format and ended as a four-colour glossy magazine. It contained 28-32 pages on average, was published four times a year (March, June, September and December) in separate, but virtually identical French and English versions, and was distributed to all employees. The purpose of this magazine was to provide information on safety matters to first-line operating and maintenance employees. The magazine never had a management article and frequently had an editorial, while the main article was generally a four-page spread of articles on a single topic. Regular features included: safety and accident statistics, articles on serious accidents, safety rules and regulations, hazardous materials, safety equipment, and safety at home, health advice, a page on the environment, and comic strips illustrating various safety rules. Individual articles were approved by the management of the various groups/departments concerned. The entire magazine was then approved by a senior executive in the head office Public Affairs department as well as by the Assistant Vice-President - Safety and Regulatory Affairs, also at the head office. During the period covered by the study, the magazine was written by a group of Anglophone freelance writers located throughout the country, under the supervision of a Francophone writer working out of the company's head office Public Affairs department. The translation was produced by an individual who first worked for the company's Linguistic Services department and was later transferred to the Public Affairs department to oversee all French-language materials produced by the department.

Rail Lines / Écho Rail

This regional vehicle, published from 1977 To 1995⁹, was written in English and translated into French. It was produced in tabloid format (8 ½ x 17), printed in black and white with colour for the masthead, and contained eight pages, with four in English and four in French, in a back-to-back format known as tumbler or *tête-bêche* format, with both versions basically identical. It was published on average ten times a year, on the same schedule as *Keeping Track / Au fil du rail*, and distributed to the employees and pensioners of the railway's Atlantic region (approximately 40,000 at the outset and 8,500 when the newspaper was disbanded)¹⁰. The purpose of this magazine was to provide information about business matters, articles about employee accomplishments, and information of interest to employees (such as retirement notices). The magazine only rarely contained a management article and never contained an editorial. The main articles were for the most part quite brief. Individual articles were generally approved by management of the various groups/departments concerned. The entire magazine was then approved by the regional vice-president. The newspaper was written by a single freelance writer, working in Moncton, and the translation was produced by a translator working out of the regional head office. This individual was the region's sole translator and responsible for all French-language materials. She worked in cooperation with the company's Linguistic Services department and her material was occasionally revised by the translator working in the head office Public Affairs department.

⁹ Information obtained from Denise LeBlanc, former CN employee (Atlantic Region).

¹⁰ Information obtained from Denise LeBlanc, former CN employee (Atlantic Region) and Kathy Malley, freelance writer responsible for writing *Rail Lines*.

The Laurentian / Le Laurentien

This regional vehicle was produced for a single year, 1994, and written primarily in French and translated into English. It was a full colour, glossy magazine, containing 16 pages, on average, although the first issue contained 20. A total of five issues were produced in separate but identical French and English versions. It was distributed to all employees in the railway's St. Lawrence (Quebec) region (~ 4,500)¹¹. The purpose of this magazine was to provide information about business matters, company policies and programmes, social issues and safety matters, with a focus on employee rather than management accomplishments. It regularly contained a management article, an editorial (written either by the magazine editor or a selected employee) and a feature article. Individual articles were approved by the management of the various groups/departments concerned. The entire magazine was then approved by the regional Public Affairs manager. During the period covered by the study, the magazine was written by one company writer and one contractual writer, both working in French, and translated by the company's Linguistic Services department.

Inforum

This departmental vehicle was produced for several years, from the late 1980s on¹², and written primarily in English and translated into French. It was distributed to the employees of the company's Information Systems (IS) department, one of the company's

¹¹ Information obtained from Julie Goulet, contractual employee for CN.

¹² The exact dates are not available and the employees responsible for this publication are no longer with CN.

largest white-collar departments (no numbers could be obtained). The purpose of this magazine was to provide employees with information about department activities and accomplishments. It was produced in black and white, with colour used for the logo on the front page. The number of pages varied, as did the publication frequency. During the period covered by this study, it was published only twice. Article topics included: a regular interview with the departmental vice-president, interviews with senior executives, articles about new developments and systems and occasional information about social matters. It was written by an individual in the Information Systems (IS) department who had been placed in charge of departmental communications and was translated by the company's Linguistic Services department.

À la Pointe du futur / Point to the Future

This vehicle was produced for several years (no exact dates are available) for the employees (~ 1500) working at CN's main locomotive equipment and rolling stock maintenance facility in Pointe St. Charles (Montreal) which has since been sold. It was produced in a magazine size, black and white, with a varying number of pages and distributed to the employees four times a year. Each issue contained a management article, an editorial and a feature article. Regular features included articles on business matters, company issues, programmes and benefits, interviews with employees (both executives and blue-collar workers), articles on social issues, articles about the accomplishments of employees and their families, general interest articles, and recipes.

The magazine was written by a former electrician who had been put in charge of the magazine and translated by the company's Linguistic Services department.

Research Design

The research design was chosen with two goals in mind. First place, the study was set up so that it could be reproduced. Specifically, it is hoped that another researcher can use the same methodology with another corpus in order to determine if my results apply only to the corpus I have chosen or if they apply generally to other corpora. Second, I had hoped to use computer technology or software as much as possible in order to reduce the time required for this investigation.

Method of Gathering Data

I chose a two-pronged approach with respect to gathering information: an interview with the translators who actually translated the vehicles I used in my corpus and a corpus analysis which was by nature subjective since, in this study, I assumed the role of translation critic, reading and coding patterns in the text, naming the elements coded and, finally, classifying them. This two-pronged approach was selected in order to see if the data obtained from the corpus about the strategy (strategies) used by the translators would be supported by the translators' comments about their work.

Translator interview

The purpose of the interview was to determine how the translators perceived their roles in order to determine, later, if this would be visible in their translations. The questionnaire used for this interview is provided in Appendix II. The interview was done with the permission of the Director of CN's Linguistic Services Department.¹³ The initial goal was to interview/survey every translator in the department. The questionnaire was extremely simple and intended to take up as little time of the translators' time as possible. Apart from being asked to provide a certain amount of demographic information, the translators were asked five very basic questions and given an opportunity to make comments. A concentrated effort was made to word the questions as neutrally as possible. The questionnaire was not, however, tested to ensure that it was completely free of bias and that the results were reliable for reasons which will become apparent in the following paragraphs (specifically, as a result of events taking pace at CN, there were serious time constraints with respect to the period during which the survey could be conducted). I was not present at the times all but one of the questionnaires were completed in order to retain a certain distance. The only exception occurred in the case of the translator who worked for CN's regional Public Affairs office in Moncton. As a result of technical difficulties (neither her fax nor her email were operational on the day of the survey), I read the survey questions to her over the telephone and took her answers down verbatim.

¹³

Ms. Nycole Bélanger, who now heads the translation department at Glaxo Wellcome.

Although questionnaires were made available to all of the employees of CN's Linguistic Services department¹⁴ as well as the various freelance translators involved in translating CN's various publications, a few problems were encountered. Forty-eight hours after permission was obtained to distribute the questionnaire, employees in CN's Linguistic Services department were informed that the department was being closed and that they would be laid off. By July of 1995, the department was closed and many of the employees were laid off. A core group of about ten employees (translators, terminologists, support staff and administrative personnel) invested their severance packages in setting up a new company which would operate independently of CN to perform the same translation duties before. Needless to say, given this state of flux, some of the translators in the survey group were not in the mood to be surveyed. Also, there was very little time in which to conduct the survey as a result of the fact that certain translators were physically leaving the company and others had more important matters (such as setting up a new corporation) to deal with. Fortunately, most of those who had the most direct involvement with the translation of the vehicles which make up my corpus did take part in the survey. The survey was intended to elicit information about the translator (education, experience, specialization, types of documents translated), to determine what they saw as the company's primary reason for translating, to determine if the translator saw a need to correct or improve on the original while translating, to determine whether they felt responsible for ensuring language quality within the

¹⁴ Ms. Nycole Bélanger placed the questionnaires at the reception area and informed the translators they were there. The translators were given the option of responding or not.

company, to find out when they were brought into a project. The most important goal of the survey was to determine how the interviewee viewed his/her role as a translator.

Corpus analysis

All of the articles in the corpus were assigned an identification code to facilitate references to the articles. This code identified the vehicle, the issue, the type of article and the language. A sample identification code follows.

IV-1-a.e / IV-1-a.f

The first component, the roman numeral, identifies the vehicle. Roman numerals were assigned as follows: I - *Keeping Track / Au fil du rail*; II - *Eye on Safety / Prévenir*; III - *Rail Lines / Écho Rail*; IV - *Le Laurentien / The Laurentian*; V - *À la Pointe du futur / Point to the future*; and VI - *Inforum*. The second component indicates the issue number. The third component (a, b, or c) indicates the type of article, with “a” used for management articles, “b” used for editorial articles, and “c” used for feature articles. Each identification code ended with an “e” or an “f”, with the “e” standing for English and “f” for French.

The corpus analysis included three phases: a statistical analysis of the texts analyzed, the calculation of readability indices, and a word-by-word, line-by-line comparison of the translations with the originals using a software programme called Hyperresearch. Once again, this approach was used in an effort to see if the data obtained

from one source could be corroborated by other data obtained from another. In preparation for the analysis, the texts were typed, using WordPerfect 6.1, in order to be in a computer readable format. Originally, it had been hoped that the texts could be scanned into computer format. However, given the facts that many of the texts were highly formatted, that there were a large number of photographic and graphic elements both surrounding and sometimes underlying the texts in some vehicles, and that some of the vehicles were highly colourful, computer scanning did not produce satisfactory results, in terms of textual quality and accuracy.

Statistical analysis

Many translators believe that French texts are generally longer than English ones. This can be borne out by the fact that, in my work as a freelance translator, many of my clients calculate the amounts (paid per word) they owe me by adding 10% to the number of words in my translation (as calculated by the software in which I do the translation) rather than having actually counting the words in the source-language text (which is considerably time-consuming). The 10% figure is generally accepted in the translation industry. I have also heard many translators say that translations are always longer than the original because the translator often clarifies and explicates. Although these two beliefs would appear somewhat contradictory, they could be indicative of a translation strategy in the sense that the translator is either making an effort to be more concise or is in fact adding clarifications to the text. In an effort to see if purely statistical data on text length could have any significance, this phase of the data gathering involved counting the

number of words, sentences and paragraphs in each of the texts to be analyzed.

Furthermore, in preparation for calculating the readability of both the translations and the originals, I also determined the number of short sentences and long sentences and calculated the number of words per sentence, the number of sentences per paragraph and the maximum number of words per sentence. This was done using the document information and document summary features in WordPerfect 6.1 and Word 6.0, and was confirmed by manual counts whenever there were any discrepancies at all in the figures provided by the two programmes.

Readability indices

Given the stated belief on the part of those responsible for the various vehicles that the articles had to be written in a clear, intelligible style, as well as the concern on the part of certain groups within CN that literacy, or rather illiteracy, may well have been problematic in certain departments, it was thought that the readability of translations might somehow be a problem in the sense that there might be an effort, whether conscious or unconscious, on the part of the translator to produce a translation that was somehow more polished or harder to read than the original. Without claiming to measure the actual complexity of reading a given text, readability indices such as the Flesch, the Flesch-Kincaid, and the Gunning Fog indices do use calculations involving sentence length, word length, and number of syllables to determine the difficulty of texts, based on the assumption that longer sentences are harder to read than shorter sentences and that bigger words are harder to understand than smaller ones. For instance, according to both

Flesch and Gunning, a slow reader with little education will find sentences containing 16 words easy to read, an average reader with an average amount of education can easily read sentences containing 22.5 words and a fast reader with high levels of education can read sentences containing 29 words (Richardeau 1978, 91).

For this study, readability measurements were also obtained by computer. First, both WordPerfect 6.1 and Word 6.0 come with English grammar checker components which calculate either the Flesch (Word 6.0) and the Flesch Kincaid (WP 6.1) readability indices and French grammar checker components which calculate the Flesch reading index. The Flesch reading ease index calculates both the average number of syllables and the average sentence length for 100 words and applies the following formula: $206.84 - [(1.015 \times \text{words/sentence}) + (.846 \times \text{average syllables per 100 words})]$. With this formula, the higher the score the greater the reading ease (Richardeau 1973, 94). Therefore, a score of 90-100 indicates that a text is very easy to read (can be understood by 90% of the population); 80-90 easy (can be understood by 86%); 70-80, fairly easy (can be understood by 80%); 60-70, standard (can be understood by 75%); 50-60, fairly difficult (can be understood by 40%); 35-50, difficult (can be understood by 24%); and 0-30, very difficult (can be understood by only 4.5%). The Flesch-Kincaid readability index also computes readability based on the average number of syllables per word and the average number of words per sentence, using the following formula: $0.39(\text{words/sentence}) + 11.8 (\text{syllables/word})$. In this case, the score indicates a grade school level. For example, a score of 8.09 means that an 8th grader would understand the

document, with standard writing being approximately equivalent to the 7th-8th grade level.

Finally, for the purposes of this research, the Flesch reading index was chosen since it was the only one available in both French and English computerized grammar checkers. It should, however, be noted that the readability of French and English texts cannot be compared in the same manner (Richardeau 1969; Richardeau 1978). After comparing the results obtained from various indices, Richardeau concluded (Richardeau 1978, 91) that both the Flesch and Gunning readability indices could be used to measure reading ease in French, if the figure obtained were multiplied by 1.5. As a result, the Flesch readability index was calculated for the English texts and the Richardeau-Flesch readability index was calculated for the French texts. For the English texts, the computerized grammar checkers were used to calculate the readability index. This was then verified by hand. For the French texts, the Flesch readability index was obtained by computer, confirmed by manual calculations and then multiplied by 1.5.

Comparison of translations and originals

The bulk of the corpus analysis involved using Hyperresearch for an actual comparison of the translations and the originals. In her analysis of annual reports using Hyperresearch, Kelly (Kelly 1996, 69-72) used a seven-step procedure. She determined the sampling unit; determined the recording units; determined the themes to be coded; determined the categories to be used in the coding; determined the coding mode; test coded a sample; and assessed the achieved reliability and validity.

To a certain extent, this procedure applies to this investigation. The sampling unit is the three types of articles (management article, editorial and main feature) analyzed. The recording unit is simply text — however long or however short, the sampling unit is the amount of text required for understanding. In my case, I did not determine the themes in advance. The translations were compared with the originals on a word-for-word and line-for-line basis. This involved comparing the translation, in computer format, to the original, in paper form, and recording the elements noted (what Kelly refers to as themes) by means of highlighting them in the software and then naming them. The advantage of using the Hyperresearch software for this rather than recording the elements observed manually on index cards, as I did in my M.A. thesis comparing two translations of Jean Giraudoux's *Intermezzo* (Curtis 1982), lies in the ease with which codes can be reviewed, revised, renamed as well as the ease with which statistics can be collected with respect to the number of times certain codes appear. Also software is a lot less bulky. The software does have a hypothesis development feature which was not of any use in this case. Hyperresearch was developed to search for words or strings which are repeated throughout text, as Kelly did in her thesis (Kelly 1996), as well as to code themes which occur only a few times in any given text. The hypothesis function of the software could not work with the large volume of similar elements coded in each single text in my corpus.

I did not start out with a predetermined list of elements which I was looking for, but rather coded them as they occurred. The software, then, was able to keep track of the items flagged, their location in the text, and the name assigned to them and could later be

used to calculate the total number of times each element was coded or flagged. The names of the elements coded were chosen during the coding of the first vehicle coded. The same names were then used in the same situations for the coding of the other vehicles. In the event that a new element was observed in another vehicle which had not been named and coded, there was no problem with respect to coding and naming it. The names selected for the elements coded were intended to be as descriptive and as easy to understand as possible.¹⁵ After this initial coding, all of the elements and text coded were reviewed in order to ensure both standardization with respect to the naming of the elements coded and accuracy of the coding. A list of all the elements identified in the corpus analysis is provided in Appendix V. Samples of each of these elements are provided in Appendix VI. After identifying the elements, I then classified them into one of five categories — content, style, readability, structure and terminology — based on the aspect of the original text affected by the translation. These elements were then counted, and tables were drawn up to determine what patterns, if any, occurred in the translations.

Research Limitations

This study attempts to develop a comprehensive understanding of the translating institution and translation strategy. It provides a rather painstaking methodology for looking at both. Unfortunately, portions of this methodology, specifically the compilation of the statistical analysis and the calculation of readability indices was extremely cumbersome. There are also several limitations with respect to this study.

¹⁵ This will be discussed in further detail in “Part III - Findings”.

First, only one group of translators and a single corpus were studied. This limits the generalizability of the results across translating institutions. While the findings of this study are valid, it would be very interesting to re-do it with a second group of translators and a second corpus in order to determine if the findings are specific to the group of translators who worked for CN or apply as well to other translators working for other corporations..

Second, there is the lack of input from the translation clients, either in terms of their perceptions of the role of the translators or their assessment of the quality of the translators' work.

Third, given my involvement in both writing for and translating several of the vehicles contained in the corpus, as well as my efforts to avoid including my own work in the corpus, the vehicles in the corpus do not all span the same years. Considering the lack of stability within CN and the amount of change the company underwent during the period covered by this study, there is a possibility that the dynamics both within the group of translators and in terms of their relationships with the client departments were not consistent or stable over the period in question and this may have had an impact on their work, their perceptions of their work and their clients' perceptions of their work.

Finally, and most importantly, there is the significant change which has affected the face of translation in Québec. Six years ago, when I planned this study, most translators worked for large corporate or government translation departments and this study was undertaken in the hopes of improving the relationship between the translators and the translation department, on the one hand, and the client departments, on the other.

It was also intended to highlight ways in which the translation process could improved, such as by increasing the contact between translators and writers and involving translators in the planning of employee communication projects. However, many corporate translation departments have either been closed or seriously downsized in recent years and even the federal government has significantly reduced the ranks of its translators. Increasing numbers of translators work as independent or freelance translators, for a wider variety of customers. As a result, this research has taken on a more historical significance than initially intended, documenting and providing insight into a situation which is gradually ceasing to exist.

PART III

FINDINGS

This chapter will present the data obtained from the translator survey first, followed by a discussion of that data. It will then present the data obtained from the corpus analysis, in two sections: the statistical and readability analyses together, followed by the data obtained through the comparison of the translations with the originals. Each of these sections will conclude with a discussion of the data presented in the section. This chapter will then conclude with a brief discussion of the research limitations.

Translator Interview

The survey questionnaire was submitted to all of the translators working in CN's Linguistic Services department in June 1995. At that time, there were eight translators working in the translation section, with an additional five people in the terminology section as well as three administrative staff, two support staff, and one documentalist. In addition, various contractual and freelance translators also worked for the department. The survey was also submitted to the translator working for CN's head office Public Affairs department (a former employee of CN's Linguistic Services department), the translator working for CN's regional Public Affairs department in the Atlantic region, and the freelance translator (a former employee of CN's Linguistic Services department) responsible for the translation of *Keeping Track / Au fil du rail*. Responses were received from nine people in all: six translators working for CN's Linguistic Services, the two

translators working for CN's head office and regional Public Affairs departments, and the freelance translator. Although the six Linguistic Services translators did not identify themselves in their survey responses, their identities were revealed through their responses. The two Public Affairs departments translators and the freelance translator all identified themselves in their responses. The data obtained from this survey is provided below.

The Translators and their Work

Of the nine respondents seven were female and two were male. This is typical of the profession as a whole, with the large majority of translators being women. The ages of those surveyed varied from the early thirties to close to retirement age, with three translators between 31 and 35 years of age, one in the 36-40 age bracket, one in the 41-45 bracket, two in the 46-50 bracket, one between 51 and 55 years of age, and one close to retirement in the 61-65 age bracket. Their years' of experience varied in a similar manner, with two translators having five years' experience or less, two having six to ten years of experience, two having 11 to 15 years of experienced, two having 21 to 25 years of experience and one with 26 to 30 years of experience. Their education levels also covered a wide spectrum, with one person having a D.E.C.¹, four having a Bachelor's degree in translation, two with a Master's degree in translation, and two others having various certificates from France. Seven of the nine respondents translated from English to French

¹ This individual was initially hired to work at CN as an electrician. When a translator's position was posted internally, she applied and was accepted. At the time of the survey, she was studying part-time at night for her B.A. in translation.

with the remaining two translating from French to English. Three of the translators indicated they spent most of their time on a particular type of translation (two specializing in technical translation and one in administrative translation) and the six others indicated no specialization. All nine of those surveyed worked on the vehicles which make up the corpus as follows: the English-to-French freelance translator worked on *Keeping Track / Au fil du Rail*; the English-to-French full-time translator working for CN's head office Public Affairs department was responsible for the translation of *Eye on Safety / Prévenir*; the English-to-French full-time translator working in CN's regional Public Affairs department in Moncton was responsible for the French version of *Rail Lines / Écho Rail*; the two French-to English full-time translators were responsible for the translations of both *Le Laurentien / The Laurentian* and *À la Pointe du futur / Point to the Future*; and two English-to-French Linguistic Services department translators surveyed were responsible for the translation of *Inforum*.

Survey Responses

In addition to providing general information about themselves and their work, the translators were asked several specific questions in an effort to determine what they understood their company's perception of their role to be and what they perceived their role to be. All in all, eight questions were asked and the translators frequently provided more than one response.

Question: What is the company's primary reason for translating the type of documents you spend most of your time translating (i.e. for comprehension, respect of language legislation, to meet employees' language needs, to meet employees' language rights, etc)?

The reasons given were ranked as follows: respect of language legislation (indicated by six translators); to meet the employees' language needs (six); to meet the employees' language rights (five), comprehension (two), and to meet the customers' language needs (one). Obviously, several of the translators indicated more than one reason.

Question: As a translator, do you correct content/factual errors

All nine translators surveyed responded to this question in the affirmative.

Question: Do you notify the author about such errors?

All nine of those surveyed responded in the affirmative.

Question: As a translator do you improve the writer's style?

Eight of the translators replied in the affirmative and one did not reply at all.

Question: As a translator, do you correct or report language errors which you notice in company materials?

Eight of the nine translators replied in the affirmative, with one of the two French-to-English translators replying in the negative.

Question: As a translator, are you responsible for ensuring language quality within the company?

Five of those surveyed replied in the affirmative and two did not reply. Two replied in the negative: one French-to-English translator and the English-to-French freelance translator (for obvious reasons).

Question: When is the translator brought into the project?

Although the French-to English senior translator said that she is very occasionally brought into a project at the planning stage, all nine respondents indicated that they are generally consulted only after the document has been written in the source language.

The translators were also asked to define their role as a translator in their own words. While three of the respondents provided no definition, some of those surveyed once again provided more than one response. Their responses basically fell into two

categories, with seven people indicating that they served as an essential link in the communication process and three saying that they helped bridge language barriers.

Translators' Comments

Finally, the translators were given an opportunity to make comments and four of them did. The English-French freelance translator seemed to complain of the lack of time the translator was given for her work, writing: "Il serait parfois bon que le traducteur participe à l'élaboration d'un projet ce qui simplifierait sa tâche et permettrait une meilleur compréhension du texte." She was seconded by the French-to-English senior translator, who wrote: "There are few people who incorporate translation into their project planning. In 90% of the cases, translation is an afterthought. French-to-English, in particular, is characteristic of this (at CN). Deadlines are tight; texts are short; in most cases they are required for comprehension purposes only. When we are asked to be part of the planning stage (ex.: *The Laurentian*), the work is more interesting because we have a say in how the work gets done." Finally, the two Public Affairs departments English-to-French translators both admitted that they work to improve the text. The translator working in the regional Public Affairs department in Moncton stated: "When I translate, I often propose changes to source language documents in order to improve them. I'm very picky. If I find errors in content or factual errors, I always call the author/client to advise them." And the translator working for the head office Public Affairs department wrote: "I improve the writer's style as much as I can as long as the customer is competent enough in French in the field and is not too scared of adaptation."

Discussion of Survey Findings

There are two main areas of interest in this data. First, there is the matter of CN's reasons for translating. Two-thirds of the respondents indicated that the railway translates materials in order to comply with language legislation, with a majority also saying that there was a need to respect the employee's language rights. This would appear to indicate that the translators believe that they are employed primarily as a result of legal requirements and that possibly without that legislation they might not be employed. At the same time, a majority also stated that the Company hired them to meet the employees' language needs, indicating that there is a language barrier to be bridged. This is supported by the translators' views of their role as both an essential link in the communication process and as a bridge across language barriers.

Second, there are the translators' admissions that they correct content/factual errors (100%), notify the authors about such errors (100%), improve on the writer's style (100%), and clarify or explicate the writer's thoughts (88.9%). This indicates a willingness to change the text, albeit for the stated purpose of improving it. Nevertheless, the translators do not appear to feel bound to respect the original if they find it unacceptable either in terms of accuracy or quality. This willingness to improve is further supported by the comments made by both the English-to-French full-time translator working in the Moncton regional Public Affairs department and the English-to-French full-time translator working in the head office Public Affairs departments. When this factor is considered in conjunction with the translators' admissions that they correct or

report language errors in company materials (88.9%) and feel responsible for ensuring language quality within the company (55.6%), it is clear that translation is in fact being used to improve language quality, as discussed in Part I.

A final point of interest is the fact that the translators surveyed all stated that they are generally brought in to work on a project after the document has already been written in the source language. When considered along with the comments by both the English-French freelance translator and the French-to-English full-time senior translator, this would appear to be more of a serious complaint than a mere statement of fact.

Corpus Analysis

As described in Part II, there were two components to the corpus analysis: a statistical and readability analysis and a line-by-line comparison of the translations and their originals, using the Hyperresearch software to name and quantify the various elements identified.

I. Statistical and Readability Analysis

In addition to compiling the Flesch reading index (for the English texts) and the Richardeau Flesch reading index (for the French texts), a total of eight items were counted for both the source and the target language texts for the statistical portion of the corpus analysis: number of words, number of sentences, number of paragraphs, number of long sentences, number of short sentences, average number of words per sentence, number of sentences per paragraph, and the maximum number of words per sentence.

The data obtained from the statistical and readability data was highly inconsistent and inconclusive and, as a result, will be presented in a summary manner. The actual data is provided in Appendix VI.

Keeping Track / Au fil du rail

The corpus includes the 1994 volume of *Keeping Track / Au fil du rail*. During that year, a total of nine issues were published. Only two of the three types of articles selected for the corpus appear in this vehicle: the management column, called “Dialog with the President”, and the feature article. This vehicle never printed an editorial. Therefore, a total of 18 articles were analyzed for this newspaper, nine management articles and nine feature articles.

The statistical and readability data for this vehicle was highly varied and no significant differences were noted between management and feature articles. Although no strong, consistent patterns were found, certain consistencies were identified. First, two-thirds of the translations were longer than the original, with half of that (or one-third of the eighteen translations) over 20% longer than the original. This would seem to provide some support for the belief that translations are generally longer than the original. Second, the translator did take a few liberties with respect to the formal structure of the text (number of sentences, number of paragraphs, and average number of sentences per paragraph). For instance, half of the translations contain more sentences than the original, while almost half contain fewer, two-thirds of the translations contain either more or fewer paragraphs than the original, almost half of the translations (eight of 18)

had a higher average of sentences per paragraph with one-third having a lower average (although the differences in the average number of sentences per paragraph were not significant). These three factors combined indicate that while the translator occasionally found it acceptable to both combine and break up paragraphs as she saw fit, there still seems to be a great respect for the formal structure of the original and the translation unit may be either the sentence or the paragraph. Third, there were significant differences with respect to both the number of long sentences and the number of short sentences in the translations as compared to the originals. Namely, almost two-thirds of the translations (11 of 18) contained more long sentences than their originals, while two-thirds also contained fewer short sentences than their originals. This would appear to support Richardeau's claims that French sentences are generally longer than English sentences. At the same time, it also poses a problem with respect to the graphic layout of the newspaper, since the same space is allotted for both the French and English versions. Finally, there were some differences with respect to readability indices. Namely, over half of the translations (55.6%) were assessed as being more readable than the original, with one-third (33.3%) being less readable and 11.1% being roughly the same in terms of readability. Although these figures would not appear to be strong enough to indicate that the translator is either making a conscious effort to improve the readability, on the one hand, or manipulating the text in such a way that it is harder to read than the original, they do indicate that the translator does not always respect the original in terms of readability.

Eye on Safety / Prévenir

The corpus includes the 1993 volume of *Eye on Safety / Prévenir*. During that year, a total of four issues were published.² Only two of the three types of articles selected for the corpus appear in this vehicle: the editorial and the feature article. This vehicle never printed a management article as the executive responsible for CN's safety programme³ insisted that the magazine was to focus on employees and primarily on blue-collar employees. Furthermore, although there was generally an editorial in each issue, there was none in the third issue produced in 1993. Finally, the feature article was generally a series of articles published in the four-page centre spread of the magazine. Therefore, a total of seven articles were analyzed for this newspaper: three editorials and four feature articles or article series.

The data for this vehicle was interesting in several respects. First, there were differences with respect to the editorials and the features in terms of word and sentence count. Specifically, all of the feature articles or series of articles contained both more words and more sentences in translation while the editorials contained either the same number of words and sentences or fewer words and sentences. This would appear to indicate that, for some reason or other, the translator may have been expanding or perhaps explicating when translating the feature articles. Yet in terms of the number of long sentences and the number of short sentences, it would appear that the translator handled

² I was responsible for coordinating the writing and production of the fourth issue produced that year, as well as for the three issues produced the following year (1994), before the magazine was discontinued, following the September 1994 issue.

³ Mike Darby, Assistant Vice-President of Safety and Regulatory Affairs.

both the editorials and the feature articles or series of articles in the same manner.

Second, it is also very interesting to note that six of the seven translations scored higher reading indices than the originals, with only one scoring lower (although close). This might be indicative of an effort on the part of the translator to make her translation easier to read.

Rail Lines / Écho Rail

The corpus includes the 1993 volume of *Rail Lines / Écho Rail*. During that year, a total of nine issues were published. Only one of the three types of articles selected for the corpus appeared regularly in this vehicle: the feature article. This vehicle never printed an editorial and only rarely a management article. During the year in question, only one management article was printed — in the December 1993 issue (Vol. 10, No.10).⁴ Therefore, a total of 10 articles were analyzed for this newspaper: nine feature articles and one management article.

Three elements of the data for this were of particular interest. The first two are text length and the maximum number of words per sentence (longest sentence). All ten translations were longer than the original and the longest sentence in each was longer than the longest sentence in the original. These facts considered in conjunction with the facts that 50% of the translations had more long sentences and fifty percent had fewer short sentences, would appear to support the belief that translations are generally longer than

⁴ Although only nine issues were printed, the numbering was not consistent and there was no Vol. 10, No. 7.

originals. Finally, the third element of interest is the reading indices. All ten translations scored higher reading indices. More data would be required to see if this is indicative of a tendency on the part of the translator to make her translations easier to read.

Le Laurentien / The Laurentian

The corpus includes the 1994 volume of *Le Laurentien / The Laurentian*. During 1994, the only year the vehicle was produced, a total of five issues were published. Feature articles were published in each issue and, as in the case of *Eye on Safety / Prévenir*, the feature was occasionally a series of articles on the same topic. Only one management article was published — in the last issue. An editorial was published in each issue but the last. Therefore, a total of ten articles were analyzed: five feature articles, four editorials, and one management article.

There was no discernable difference in the manner in which the management article, the editorials and the feature article were translated. There appears to have been some attempt on the part of the two French-English translators who worked on this vehicle to reduce the length of the articles in question. This attempt was by no means consistent across this portion of the corpus, nor even that great in scope. For instance, 80% of the translations were shorter than the originals. Yet both these translations and the translations which were in fact longer, were still very close in length to the originals. This ties in with the fact that in the case of 70% of the translations, the longest sentence in each was shorter than in the original. Yet at the same time, the longest sentences in three of the texts were longer than in the original. Likewise, 70% of the translations

averaged fewer words per sentence, while 30% averaged more. And again, 70% contained fewer long sentences and 50% contained more short sentences, while 10% contained more long sentences and 50% contained fewer short sentences. Finally, 70% of the translations contained fewer words per sentence, with 30% containing more words per sentence. And in the case of three of those texts containing fewer words per sentence, the differences were negligible.

The data also indicates a relative closeness to the physical structure of the original. Although 60% of the texts contained fewer sentences than the original, in half of these translations the difference was only one sentence. Added to the fact that 20% had the same number of sentences and 20% contained only one additional sentence, a total of 70% of the translations were very close to the originals in terms of number of sentences. The same applies to the number of paragraphs: 90% of the translations either had the same number of paragraphs or one extra paragraph.

A final interesting fact concerns the reading indices. Eighty percent of the English translations scored lower reading indices than the originals. Despite their apparent efforts to reduce the total length of the translations, sentence length and use fewer long sentences and more short sentences, they managed to also reduce the readability of the texts. More data would be required to determine how this was done.

À la Pointe du futur / Point to the future

The corpus includes the 1993 volume of *À la Pointe du futur / Point to the future*. During that year, a total of four issues were published. This vehicle regularly contained a

management article, an editorial and a feature article. Therefore, a total of 12 articles were analyzed for this newspaper: four articles for each of the three types chosen for this corpus.

There was no clear pattern separating the three types of articles in this vehicle; the figures seem to apply to all. The largest grouping of figures concern text and sentence length. Namely, all but one of the translations were shorter, with the remaining translation being only one word longer than the original. In addition, two-thirds of the translations had fewer long sentences and one-half had more short sentences. For another two-thirds, the longest sentence in each translation was shorter than or the same length as that in the original. These statistics combined would appear to indicate that the two French-English translators who worked on this vehicle were making a conscious attempt to reduce text and sentence length. In professional conversations we had during the course of my work at CN, both translators indicated that they considered the original texts poorly written and often wordy. However, their failure or omission to consistently reduce text and sentence length across all of the vehicles in this portion of the corpus might also indicate that despite their awareness of what they perceived as a problem they were, nevertheless, unable to solve it for some reason.

Another statistic of interest concerns the number of sentences and the number of paragraphs. There were some changes in this respect, but not many. Finally, the reading indices were also of interest. Two-thirds of the translations scored lower on the reading indices despite the efforts of the translators to reduce sentence and text length. More data is required to determine a reason for this.

Inforum

The corpus includes the 1994 volume of *Inforum*. During that year, a total of two issues were published. Only two of the three types of articles selected for the corpus appeared regularly in this vehicle: the management article and the feature article. This vehicle never printed an editorial. Therefore, a total of four articles were analyzed for this newspaper: two management articles and two feature articles.

There were a few interesting points with respect to the data for this vehicle. In the first place, the translations of the management articles are much closer to the original in terms of length than the feature articles are. Second, when all of the statistics are considered, there do appear to be some differences with respect to the type of articles although these differences do not occur consistently enough across all of the categories examined to constitute a pattern or trend. At the same time, the differences between the translations and the originals in terms of word count, number of sentences and number of paragraphs are not even very large at times. This would appear to indicate that the translator was staying close to the structural format of the original.

Discussion of Statistical and Readability Analysis for All Vehicles

This portion of the data was extremely inconsistent. It was difficult to find patterns in the data obtained for a single vehicle let alone a pattern which carried across one or more vehicles in the corpus or even across the entire 61-article corpus. At the same time, it was impossible to identify true patterns based on the type of article

translated: editorial, management article, or feature article. And, yet, without being actual patterns, there are a few consistencies.

a) Word counts

One of the strongest consistencies concerns the word counts (namely the length of the translations). Specifically, there would appear to be a difference between those texts translated into French and those translated in English. Of the 61 articles in the corpus, 39 were translated from English into French and the remaining 22 were translated from French to English. Although the French translations were not all longer than the originals, a large number of them (over 60%) were. The opposite is true for the English translations. Namely, most of the English translations (over 86%) were shorter than the originals. Yet, the English translations were not always a great deal shorter than the French originals. For instance, in the case of *Le Laurentien / The Laurentian*, both those translations which were shorter than the original (80%) and those that were longer were very close to the original in length. Larger differences were noted with respect to *À la Pointe du futur/ Point to the Future*, where the translation could be up to 17% shorter than the original. These figures are interesting in several respects. First, they would appear to contradict the belief that all translations are longer than their originals and indicate instead that French translations are longer than their originals. Given the fact that all six vehicles analyzed used identical layouts for both language versions, these differences in length (regardless of which version is longer) could cause serious formatting problems. The staff who produced *Keeping Track / Au fil du rail* were aware

of this situation. In fact, a smaller font size was used in the printing of the French version. Furthermore, while word count does not have that great an impact for corporate translations, it is crucial for freelance translators. There are generally two ways in which a freelance translator calculates his/her fees. Most English-to-French translators are paid according to the number of words in the source (English) text, which would appear to give them a distinct disadvantage since they appear to produce more words than they are paid for. At the same time, French-to-English translators are generally paid either by the number of words in the source text, which gives them an advantage over translators working in the opposite direction, or according to the number of words in the translation they produce plus a percentage which may range anywhere from 10% to 18%. This could also be very advantageous to them since, for instance, the English translations in the translation corpus were not consistently shorter than the originals by that type of percentage.

This trend is confirmed by the differences in the number of long and short sentences, based on the translation directions. Namely a majority of the French translations (22 out of 39 texts or 56.4%) have a greater number of long sentences than the original, while the same number also have fewer short sentences than the original. The opposite is true in the case of the English translations. Namely, 11 of the 22 English translations (50%) have more short sentences than their originals and 15 out of the 22 translations (68.2%) have fewer long sentences.

This is further supported by the figures concerning the average number of words per sentence (or sentence length). As in the case of the total length of the translations,

here too the corpus seems to be split according to translation direction. Specifically, in the case of a majority of the French translations (23 out of 39 translations or 59.0%), the average sentence length is longer, while in the case of a larger majority of the English texts (16 out of 22 translations or 72.7%), the average sentence length is shorter.

This is once again further supported by the statistics concerning the maximum number of words per sentence or the longest sentences in the translations. Across the corpus as a whole, the statistics are not revealing. Specifically, in 34 of the translations, the longest sentence is longer than in the original, in 25 of the translations the longest sentence is shorter and in two of the translations, the longest sentence is the same length. Yet once, when the translations are separated according to translation direction, these statistics become more significant. Namely, in the case of the English to French translations, in 27 of the translations the longest sentence is longer than in the original, in eleven it is shorter and in one it is the same length. Just the opposite is true in the case of the French to English translations: in seven of the translations, the longest sentence is shorter than in the original, in 14 it is shorter, and in one it is the same.

Thus, the main fact revealed by the statistical analysis of the translations would appear to be conclusive evidence that French translations are generally longer than English ones.

b) Formal structure

The second significant fact demonstrated by the statistics concerns the formal structure of the originals and their translations. For instance the interesting point with

both respect to the number of sentences and the number of paragraphs in the translations was the consistent smallness of the differences between the translations and the originals. Specifically, in terms of the number of sentences, although there were only 11 translations which contained exactly the same number of sentences as the originals, the differences between the number of sentences in the originals and the translations were less than three sentences (either more or fewer) in the case of 49 translations (70.5%). This is all the more remarkable when you consider three specific translations. For instance, in the case of article II-3-c (*Eye on Safety / Prévenir*, Vol. 3, No.3, feature article), both the original and the translation contained over 2,000 words, yet there was a difference of only two sentences between the original and the translation; in the case of article VI-1-a (*Inforum*, Winter/Spring 1994, management article), both the original and the translation contained over 1,500 words, yet the word counts were very close (1,527 words in English and 1,518 words in French) and there were 84 sentences in the English original and 87 in the French translation; and in the case of article II-4-c (*Eye on Safety / Prévenir*), both the original and the translation contained over 3,500 words, yet there was a difference of two sentences between the two versions. Likewise, in the case of the number of paragraphs, a total of 32 of the translations (52.5%) contained exactly the same number of paragraphs whereas, with the exception of two *Keeping Track / Au fil du rail* translations where the difference in the number of paragraphs was four and six, respectively, the difference in the number of paragraphs between the original and the translation was two or fewer paragraphs (either more or less) in the case of 27 translations (44.3%). The statistics concerning the number of sentences per paragraphs are also of

interest in this respect. In keeping with the type of writing found in vehicles such as the six analyzed for this corpus, all paragraphs were generally short, in both the originals and the translations. Furthermore, when you resort solely to counting the number of sentences, it might appear that there are differences. Namely, of the total corpus, 32 translations averaged more sentences per paragraph, 17 averaged fewer sentences per paragraph and 12 averaged the same number of sentences. This breakdown appears consistent regardless of the translation direction. Specifically, in the case of English to French translations, 18 average more sentences per paragraph, 12 average fewer and nine average the same number. Likewise, in the case of the French to English translations, 14 average more sentences per paragraph, five average fewer and three average the same. This might appear to indicate that the translators had a tendency to break down sentences into additional sentences, perhaps out of a desire to reduce sentence length. Yet, a closer look at the actual figures indicate that in a large majority of the cases, the actual differences in the averages are so minimal as to be insignificant. The figures concerning number of sentences, number of paragraphs and average number of sentences per paragraph appear to be consistent across the corpus, regardless of the translation direction, and appear to indicate that, despite the willingness the translators indicated in their responses to the survey to manipulate the texts they work on, they take relatively few freedoms with the formal structure of the documents they work on and that the translation unit is generally the sentence and almost consistently the paragraph. Specifically, the translator would appear to be translating a sentence or a paragraph at a time, and not reworking the entire text. This could be a result of the working methods of most

translators, who translate on computer. It would appear logical that a sentence or a paragraph is the amount of text which a translator could keep track of at any time.

Furthermore, many translators now simply type their translations in over the source text, using the overwrite function of their word processing software, particularly in the case of texts which are heavily formatted. In this case, as well, the sentence or paragraph is likely the amount of text which a translator could keep track of at any given time. It would be very interesting to test this hypothesis in more depth.

c) Reading indices

Finally, the reading indices also provided some interesting figures, both in terms of the originals as well as in terms of the translations. The most astonishing fact concerning the reading indices of the originals was their overall lowness. Specifically, almost one-third (20 out of 61) originals scored less than 50 on either the Flesch reading index (English texts) or the Richardeau-Flesch index (French texts). Another element of interest concerning the original texts was the ranges of the reading indices. In all of the vehicles, except *Inforum*, the range between the lowest and the highest reading indices was consistently over 20 points. In the case of *Inforum*, this range was 11 points. These two elements together are surprising in a company such as CN where the illiteracy or poor reading skills of the employees were perceived as a problem and particularly surprising considering the fact that the articles analyzed were written by professional writers who were allegedly aware of this problem. The reading indices of the translations are every bit as interesting. To start with, the ranges from those translations with the lowest indices

and those with the highest are every bit as broad as for the originals. Even more interesting is the comparison of the reading indices for originals and translations. When the corpus as a whole is considered, 34 of the translations scored higher reading indices, 25 scored lower and two scored the same. Yet, these figures are quite different when translation direction is factored in.

Specifically, in the case of the English-to-French translations, 28 scored higher, nine scored lower and two scored the same. The opposite occurs in the case of the French-to-English translations where only six translations scored higher, sixteen scored lower and none scored the same. Obviously this is yet another aspect where the corpus tends to be divided along the lines of translations direction. Oddly enough, I had expected that the reading indices of the English translations would have been higher, considering the facts that there was some evidence in the English translations of an effort to reduce both text length and sentence length. This might have been counteracted by the fact that perhaps the English translators also used longer words (another element used in the calculation of reading index), a factor which was not quantified in this research.

II. Comparison of Translations and Originals

As stated in Part II, there was no-predetermined list of the elements to be found in the 61-article corpus. Instead, the elements observed during the line-by-line comparison of the translations and their originals were coded and named (using the Hyperresearch software) as they were observed. After all 61 translations were analyzed, all of the elements were reviewed in order to ensure coding and naming accuracy. In all, a total of 52 different elements were observed: addition; agent added; agent changed; agent removed; awkward structure; business

jargon not used; change in order; change in person (1st to 3rd); change in person (2nd to 1st); change in person (1st to 2nd); change in person (2nd to 3rd); change in person (3rd to 1st); change in point of view; change in tone (more positive); change in tone (more negative); clarification added; company jargon not used; complicated terminology used; correction made in content; emphasis added; emphasis deleted; error made in content; grammar mistake; honorific added; honorific deleted; image added; image deleted; inconsistency in use of nonsexist language; mistranslation; nonsexist usage added; omission; paragraph broken up; paragraph moved; paragraphs combined; quote used as statement; repetition added; repetition deleted; specialized railway terminology added; specialized railway terminology not used; statement used as quote; style less formal; style more formal; translation less specific; translation clearer; translation less clear; translation more concise; translation more specific; translation stronger; translation weaker; translation wordy; word play added; word play deleted.

As stated in the chapter describing the methodology used, the names for each of the elements coded were selected to be both as easy to identify and as descriptive of the element observed as possible. Specifically, all of the names selected were intended to be as obvious as possible. While some of these elements were specific to the translations analyzed, there is also a certain amount of correspondence with the definitions provided by Jean Delisle in the method he has proposed for the training of professional translators (Delisle 1993). Brief definitions of these 52 elements are provided below, with similar items grouped together, indicating any correspondence with the translation categories and definitions provided by Delisle. A list of these 52 elements is provided in Appendix V, with one sample of each provided in Appendix VI.

Definitions of elements observed in the corpus analysis

1) Addition: Jean Delisle (Delisle 1993) defines “ajout”, in French, as a “faute de traduction consistant à introduire de façon non justifiée dans le TA des éléments d’information superflus ou des effets stylistiques absents du TD.” In the case of my corpus, I have used ‘addition’ to refer solely to information which is not contained in the original but is provided in the translation. Some of the additions noted added no new information while some changed the meaning, others added details, and still others added completely new material. As will become apparent during the discussion of the elements observed in each portion of the corpus, while some of the additions could be considered unnecessary or even incorrect (and, as a result, ‘translation errors’), others have a beneficial effect.

2) Agent added/agent changed/agent removed: These three elements refer to occasions when the translator added, changed or removed the agent of an action described in the text.

3) Awkward structure / grammar mistake: Delisle’s list of the learning difficulties encountered by beginning translators (Delisle 1993) includes the language error (“faute de langue”) which he then defines as “erreur figurant dans le TA et liée à une méconnaissance de la LA” and he classifies “barbarismes, impropriétés, solécismes, mauvaises cooccurrences, fautes d’orthographe, de grammaire, le mauvais emploi des prépositions” as language errors. ‘Awkward structure’ and ‘grammar mistake’ were the

only two language errors observed in this corpus. They were coded separately since I had initially hoped to see what kind of language errors, if any, occurred and if such errors revealed either a lack of skill on the part of the translator or a deliberate strategy (as would be the case of unidiomatic translation).

4) Business jargon not used / company jargon not used / complicated terminology used / specialized railway terminology added / specialized railway terminology not used: All instances of terminological changes made by the translators were observed and identified separately.

5) Change in order: This refers to changes in the order in which items are presented. This occurred on one instance in the corpus (see example provided in Appendix VI). Although it may be considered a very minor change on the part of the translator, it was quite noticeable to me since I was aware that it was general policy for those writing for CN to place CN first in any list referring to CN and other firms.

6) Change in person (1st to third, 2nd to 1st, 1st to 2nd, 2nd to 3rd, 3rd to 1st): These elements refer to instances on which the translator changed the person of either the subject or the object of a sentence. While some of these changes could, in fact, be considered translation errors, others could be considered improvements in terms of the message being communicated.

7) Change in point of view: This refers to changes made by the translator in which the focus is shifted from one individual or group to another individual or group. See the example provided in Appendix VI.

8) Change in tone (more positive/more negative): ‘Change in tone - more negative’ refers to working in the translations which is more negative or pessimistic than in the originals, while ‘change in tone - more positive’ refers to wording in the translations which is more positive, cheerful or optimistic than in the originals.

9) Translation clearer / translation less clear / clarification added: In terms of increased clarity, Delisle refers, in French, to ‘explicitation’, which he defines as “procédé de traduction consistant à introduire, pour des raisons de clarté, dans le TA des précisions non formulées dans le TD, mais qui se dégagent du contexte cognitif ou de la situation décrite.” This corresponds only partially to what I designated as ‘clarification added’. In fact, I used ‘clarification added’ to refer to instances in which the translator added details or information which, while not specifically stated in the original could be deduced from both the context or the situation described as well as to instances in which the translator added explanatory or clarifying material which was not implied in any way in the original and which required research on the part of the translator. ‘Translation clearer’ refers to occasions when the translator used more direct or clearer language or wording than the original writer (as in the cases when the various translators replaced bureaucratic jargon with direct statements) and ‘translation less clear’ refers to occasions

when the translation was not as easy to understand as the original, as a result of the wording or language used.

11) Correction made in content / error made in content: These two elements refer to factual corrections and errors made during the translation process.

12) Emphasis added / emphasis deleted: ‘Emphasis added’ refers to occasions on which the translator placed greater stress on certain statements (as in *I **really** need to know...* versus *I need to know...*) while ‘emphasis deleted’ refers to occasions when the translator placed less stress on certain statements (using *I need to know...* as opposed to *I **really** need to know...*).

13) Honorific added / honorific deleted: ‘Honorific added’ refers to a specific type of addition (as defined in 1) above) whereas ‘honorific deleted’ refers to a specific type of omission (as defined in 17) below). This addition and omission were classified as separate elements since it was a specific policy for those writing and translating head office newspapers/magazines that honorifics were to be used only for the president.

14) Image added / image deleted/ word play added / word play deleted: On occasion, the translators studied both added and deleted images and word plays. In some cases, images and word plays were simply left out, in others they were deleted because it was impossible to translate them, and on still other occasions they were omitted because they

were badly placed or inappropriate in the original. On the other hand, the translators also added images or word plays. Some of these additions were made in order to ‘compensate’ for stylistic effects which could not be rendered at the same place as in the original. This is in keeping with the translation process Delisle (Delisle 1993) refers to as “compensation” and defines as “règle de traduction consistant à réintroduire à un autre endroit du TA un élément d’information ou un effet stylistique qui n’a pu être rendu au même endroit que dans le TD.” Yet on other occasions, the translators added images or word plays, without any need for compensation. Although there were several reasons for adding or deleting images and word plays, I did not feel the need to develop separate categories.

15) Nonsexist language used / inconsistency in use of nonsexist language: CN’s

Employment Equity Department insisted on the use of nonsexist or gender neutral language in all company documents. This element was observed in attempt to determine if this policy was respected and any inconsistencies observed in such usage were also noted.

16) Mistranslation: Delisle (Delisle 1993) defines translation error (“faute de traduction”), in French, as “erreur figurant dans le TA découlant d’une interprétation erronée d’un segment du TD et aboutissant le plus souvent à un faux sens, à un contresens ou à un non-sens.” At the start of my analysis, I had classified the text segments which I eventually identified as mistranslations as translation errors. I changed

this classification for two reasons. First, although I did make observations concerning the quality of the translations in my corpus, my focus was not primarily on quality but on what the translations could reveal about translation strategy. Therefore, the expression ‘translation error’ appeared to me to be too judgmental. Second, as will become apparent during the discussion of the findings for each vehicle which follows, although the mistranslations are in fact translation errors in terms of the comparison of the translations to the originals, they are not all errors in terms of the message or information which was intended to be transmitted and could well be considered either evidence of additional research made by the translator to clarify or correct the message being transmitted or signs that the translator viewed the situation somewhat differently than the writer of the original. Finally, I did not break down the items classified as mistranslations into sub-categories such as non-sense, contresens or faux sens since, once again, the focus was not on finding errors or assessing translation quality but on determining what other elements observed in the translations revealed.

17) Omission: Delisle (Delisle 1993) defined ‘omission’ as “faute de traduction consistant à ne pas traduire sans que cela soit justifié un élément de sens ou un effet stylistique du TD” and he defined ‘implication’ as “procédé de traduction consistant à ne pas formuler explicitement dans le TA des éléments d’information du TD, ces détails ressortant par eux-mêmes du contexte, de la situation décrite ou des présupposés extradiscursifs.”

18) Paragraph broken up / paragraph moved / paragraphs combined: Paragraph

broken up refers to a structural change in which the translator used one or more

paragraphs for information which was provided in a single paragraph in the original.

Paragraph moved refers to a paragraph which was positioned elsewhere than in the

original. Paragraphs combined refers to two or more paragraphs in the original which

were combined into one paragraph in the translation. These elements were observed and

noted since so little changes were observed with respect to the number of sentences and

paragraphs in the statistical portion of the corpus analysis.

19) Quote used as statement / statement used as quote: These two elements refer to

changes made at the structural level concerning quotes, in which words which were

attributed to someone in the original were expressed as a general statement in the

translation and words which were not necessarily attributed to anyone in the original were

attributed directly to someone on the translation.

20) Repetition added / repetition deleted: ‘Repetition added’ refers to cases in which

the translator repeated material already stated, whereas ‘repetition deleted’ refers to

occasions on which the translator did not translate material which was repetitious in the

original. While ‘repetition deleted’ could be considered akin to the concept of ‘translation

more concise’ (see 23) below) or even a sub-set of that category, it was classified

separately since instances of ‘repetition added’ were also observed and it was considered

appropriate to be able to discuss these two stylistic elements together.

21) Style less formal / style more formal: These two elements refer to changes stylistic changes made by the translators in terms of the formality of their wording. These elements were classified separately since I started my analysis with the feeling that changes in style might be behind the client's expressed dissatisfaction with the translations produced.

22) Translation less specific / translation more specific: 'Translation more specific' refers to occasions when the translator specifically stated something which was rendered in vaguer terms in the original (as in *1993* as opposed to *last year*) and 'translation less specific' refers to the opposite (as in *throughout the country* compared to *in both Eastern and Western Canada*).

23) Translation more concise / translation wordy: Delisle (Delisle 1993) expresses several concepts referring to both concision and lack of concision. With respect to the concepts of concision, Delisle refers to "concentration", "concision" and "économie". He defines the first term ("concentration") as "correspondence se caractérisant par un nombre de signifiants inférieur à celui de la LD". He defines the second ("concision") as a "procédé relevant des techniques de rédaction qui consiste à exprimer une idée dans le TA en moins de mots que le TD. La concision résulte habituellement de l'élimination des lourdeurs, des répétitions inutiles, des pléonasmes ou toutes autres maladroites de style." Finally, he defines "économie" as a "procédé de traduction relevant des techniques de rédaction qui consiste à reformuler un énoncé en utilisant moins de mots que le TD". In

terms of a lack of concision, he refers to “dilution” and “étoffement”. He defines the first concept (“dilution”) as a “correspondant se caractérisant par un nombre de signifiants supérieur à celui de la LD” and cites the example of ‘as’ and ‘au fur et à mesure’, and he defines the second concept (“étoffement”) as a “procédé de traduction consistant à employer plus de mots que la LD pour exprimer une idée ou pour renforcer un mot du TD (une préposition, par exemple) dont le correspondant en LA n’a pas la même autonomie.” None of these concepts correspond exactly to the elements observed in my corpus. I used ‘translation more concise’ to refer to text segments which were unnecessarily wordy, as a result of poor writing style, in the original and which the translator did not translate in the same manner. I then used ‘translation more wordy’ to refer to the opposite effect, namely to refer to text segments which were unnecessarily wordy, as a result of poor writing style, in the translations.

24) Translation stronger / translation weaker: ‘Translation stronger’ refers to instances on which the wording used by the translator was stronger than that in the original (as in *serious problem* compared to *problem*) and ‘translation weaker’ refers to instances on which the wording used by the translator was weaker (as in *financial difficulties* compared to *overriding financial threat*).

After the elements observed were coded, they were then divided into five separate categories, depending on the aspect of the text affected: content, style, readability, structure and terminology. Consequently, there are 14 elements affecting content

(addition, change in tone - more negative, change in tone - more positive, clarification added, correction made in content, error made in content, honorific added, honorific deleted, mistranslation, omission, translation less specific, translation more specific, translation stronger, translation weaker), 13 affecting style (change in point of view, emphasis added, emphasis deleted, image added, image deleted, inconsistency in use of nonsexist language, nonsexist usage added, repetition added, repetition deleted, style less formal,, style more formal, word play added, word play deleted), four elements affecting readability (translation clearer, translation less clear, translation wordy, translation more concise), 16 items affecting structure (agent added, agent changed, awkward structure, change in order, change in person - 1st to 3rd, change in person - 2nd to 1st, change in person - 1st to 2nd, change in person - 2nd to 3rd, change in person - 3rd to 1st, grammar mistake, paragraph broken up, paragraphs combined, paragraph moved, quote used as statement, statement used as quote), and five elements affecting terminology (company jargon not used, complicated terminology used, business jargon not used, specialized railway terminology added, specialized railway terminology not used). Based on the above breakdown, most of the elements observed (43 of 52, or 82.17%) fall into three categories — content, style and structure — with readability and terminology accounting for the remainder. What is particularly interesting with respect to the elements coded is what is missing. No gallicisms, anglicisms or unidiomatic expressions were observed. Furthermore, only two of the 52 elements could be considered indicative of a non-idiomatic translation: awkward structure and grammar mistakes. This, on its own, would appear to support the idea that the translation strategy of this group of translators was

idiomatic translation, in keeping with Mossop's discussion of translations done by federal government translators and with the type of translation promoted by Jean Delisle in his writings.¹ What remains now is to identify what else the elements actually observed reveal about translation strategy.

Vehicle by Vehicle Description of Elements Found

The data obtained through the comparison of the translations and the originals will be presented on a vehicle by vehicle basis. This presentation format was chosen in the event a trend or pattern occurred only within one of the vehicles, affected one translation direction, or concerned one specific translator or translator pair.

Keeping Track / Au fil du Rail

A total of 47 of the 52 elements coded (90.4%) were observed in the *Keeping Track / Au fil du rail* translations. This was the vehicle in which the largest number of elements was observed. Furthermore, many of the elements coded were found in several of the translations contained in this portion of the corpus and did not merely occur a single time in a single translation. Likewise, several were found more than once in a given translation. This was, in fact, the vehicle in which the most text manipulation was

¹ Delisle (Delisle 1993) discusses the concept of 'idiomatic' as follows: "Conforme à la démarche générale d'une langue, à l'usage, aux habitudes d'expression spontanée de ceux qui la parlent et dont c'est la langue maternelle. Note: Traduire idiomatiquement c'est tenir compte à la fois des servitudes de la LA, de ses tendances générales et de ses possibilités. Ainsi, l'énoncé «*He's just a friend, not a boyfriend*» signifie littéralement : «Ce n'est qu'un ami, il n'est pas mon ami de coeur» [traduction transcodée]. Il est plus probable, cependant, qu'une locutrice de langue français s'exprimant spontanément dise : «C'est un ami, sans plus» [traduction idiomatique]."

observed on the part of the translator. Yet, there was only one element which could be indicative of non-idiomatic translation: grammar mistakes. Specifically, the translator made a total of four grammar mistakes (in articles I-1-c.f, I-6-a.f, and I-1-c.f).

a) Content

The largest number of coded elements occurred in the content category. In all, a total of 699 text segments (63.6% of all the text segments coded) were in 13 of the 14 groups included in this category. The four types of elements observed the most frequently were: omission (115 occurrences), addition (170), clarification added (105), and mistranslation (191).

A number of omissions were expected in the translations of all the vehicles in the corpus and specifically in this portion of it. While I was working as the writer on the English version of the newspaper (1990-1992), it was generally acknowledged among the staff that the French translations were longer than the English originals. In addition to using a smaller typeface for the French versions, segments of text, which were considered to be of lesser importance or relevance by the individual responsible for the French version, were cut out on a regular basis. At least, that is what that individual claimed in professional conversations I had with her. In the case at hand, every single article studied contained omissions, with the frequency ranging anywhere from two to 22 omissions, with an average of six omissions per translation. The statistics are provided in the following table.

Article	Frequency
I-1-a.f	22
I-1-c.f	14
I-2-a.f	5
I-2-c.f	4
I-3-a.f	3
I-3-c.f	5
I-4-a.f	2
I-4-c.f	2
I-5-a.f	6
I-5-c.f	5
I-6-a.f	2
I-6-c.f	7
I-7-a.f	10
I-7-c.f	7
I-8-a.f	6
I-8-c.f	8
I-9-a.f	3
I-9-c.f	4
Total	115

Table 1: *Keeping Track / Au fil du rail* — Omissions

The omissions observed during the corpus analysis also ranged from relatively minor and insubstantial omissions to rather major sections of text. It should be noted, however, that none of the omissions were significant in terms of length. Specifically, no large blocks of text (i.e, sub-titles, entire sentences or entire paragraphs) were omitted in translation. The omissions which were made have been classified as either minor or

major in terms of the significance of the information omitted. Here is an example of a minor omission.

Minor omission — Example

Original (I-1-a.e): “Our studies *to date* indicate that a merger of the two companies and their facilities in the East appears to be the best option to create a rail service which can support itself and meet fully the needs of our customers.”

Translation (I-1-a.f): “Selon nos études, la meilleure garantie de survie réside dans la fusion des deux entreprises et de leurs installations dans l’Est, afin de bâtir un réseau capable de s’autofinancer et de satisfaire pleinement les besoins de la clientèle.”

As clearly illustrated by the example, this type of omissions did not change the meaning and the material omitted could be expected to be understood or inferred by the readers.

One minor omission was particularly interesting with respect to what it revealed about the linguistic make-up of Canadian National.

Minor omission — Interesting example

Original (I-3-c.e): “Other constructive suggestions put forward during the 70 minute *bilingual* Q&A session included extended pregnancy leave, an exercise room, and self-defence courses for employees who have to work late or night shifts.”

Translation (I-3-c.f): “Au cours de la période de questions qui a duré 70 minutes, d’autres suggestions constructives ont été formulés. On a évoqué, entre autres, un congé de maternité prolongé, une salle d’exercices et des cours d’autodéfense pour des femmes qui travaillent tard ou à des postes de nuit.”

This particular example refers to a meeting which French-speaking CN President and CEO Paul M. Tellier held with female CN employees on the occasion of international Women’s Day (March 8, 1994). It is interesting to note that while the

English writer felt a need to specifically indicate that the meeting was conducted in both official languages, the translator felt no such need.

Here is an example of a major omission.

Major omission — Example

Original (I-4-c.e): “CN works closely with the chemical and petrochemical industries to find new ways to safely move regulated goods.”

Translation (I-4-c.f): “Le CN collabore étroitement avec les fabricants de produits chimiques et pétrochimiques dans le but de trouver des nouveaux moyens de transporter des marchandises réglementées.”

This omission can be considered important because, although it is not significant in terms of length, it does contain information which does effectively change the meaning conveyed. Specifically, there is a significant difference between just moving regulated goods (otherwise referred to as hazardous commodities in federal legislation) and moving them safely.

There were also omissions of information which provides details.

Omission of details — Example

Original (I-9-c.e): At a recent *media* demonstration of the flatyard version, Keeping Track’s correspondent....

Translation (I-9-c.f): Lors d’une récente démonstration de la version en palier à Taschereau, le correspondant d’Au fil du rail

This type of omission reveals how the translator carefully selected details which, although they could be of interest to the reader, had no real impact on the message being communicated. Given the stated concern over the length of the French translations and the need to fit them into the same space and lay-out as the English originals, this provides

clear evidence of serious and effective editing done by the translator. The fact that the translator omitted words and small phrases, rather than entire sentences or even larger blocks of text, also reveals the translator's knowledge of and concern for the message.

Yet, there are cases in which the omission of details could be considered of importance.

Omission of important details — Example

Original (I-9-a.e): We are reengineering the company structure, remodelling *a number of* our internal services, and reestablishing our stronghold as a serious contender; all in an effort to meet the demands of our customers.

Translation (I-9-a.f): Et c'est afin de mieux répondre aux exigences de notre clientèle que nous revoyons de fond en comble la structure de notre entreprise, que nous remodelons nos services internes et que nous nous affirmons, jour après jour, comme un transporteur de choix et un concurrent de taille.

In this example, the information omitted could be considered of concern to the employees. As a result of the omission of "a number of", the article could be interpreted as indicating that all CN departments were being remodelled. This could be a source of concern to employees in a company which had recently laid off several thousand employees. Employee newspapers/magazines are generally intended to allay employee concern, not cause it. This is evidence of just how hard it is to make omissions without affecting meaning.

One surprising observation is that, despite these numerous omissions (115), the French translations were still generally longer than the English originals. This could be accounted for by the fact that the translator of this vehicle also made numerous additions.

Specifically, every translation contained added material, with the frequency varying from three to 28 additions per article and with an average of nine additions per translation. The statistics are provided in the following table.

Article	Frequency
I-1-a.f	15
I-1-c.f	28
I-2-a.f	21
I-2-c.f	10
I-3-a.f	8
I-3-c.f	3
I-4-a.f	8
I-4-c.f	4
I-5-a.f	16
I-5-c.f	3
I-6-a.f	7
I-6-c.f	15
I-7-a.f	11
I-7-c.f	3
I-8-a.f	5
I-8-c.f	4
I-9-a.f	4
I-9-c.f	5
Total	170

Table 2: *Keeping Track / Au fil
du rail* — Additions

As in the case of omissions, these additions are not significant in terms of length or the volume of material added and do vary with respect to the significance of the material added.

Some of these additions added virtually no new information to the text. An example follows.

Addition which adds no new information — Example

Original (I-9-c.e): CN's Beltpack® locomotive remote-control unit is only a little bigger than the average toy train engine. However, that 6.5-lb. box unlocks 1800 h.p. of yard-engine pulling (or pushing) power.

Translation (I-9-c.f): *Le train jouet de votre enfance serait-il soudain devenue réalité?* Le boîtier de la Lococommande® de CN, à peine plus gros que celui que vous manipulez tout petit, peut aujourd'hui déplacer des mastodontes de 1 800 chevaux-vapeur.

This type of addition includes no new information; such additions can be considered stylistic in nature, added to improve the flow of the text. The example is interesting since it may indicate that the translator thought the original article started too abruptly and needed more introduction.

Other additions, although minor in length (sometimes only one or two words) do effectively change the meaning of the text. An example follows.

Addition which changes the meaning — Example

Original (I-1-a.e): "As a result, we have been looking at ways to make Eastern rail service more efficient and competitive."

Translation (I-1-a.f): "Nous nous sommes donc mis à la recherche de solutions pour rendre notre service ferroviaire dans l'Est *beaucoup* plus efficace et concurrentiel."

This example is of interest because it increases the degree of the action or effect. In English, the company plans to become "more efficient", in French it will be much more efficient ("beaucoup plus efficace"). Considering the fact that several additions of this type were made, this could be interpreted either as a sign of pessimism on the part of the translator or, perhaps, as an initiative on the part of the translator to be more truthful

about the actual situation of the company. This type of addition is serious because it affects meaning.

Yet other additions provide details which, although harmless to the meaning of the text, are not provided in the original. One example follows.

Addition which adds details — Example

Original (I-9-c.e): After a quick briefing, Keeping Track's reporter strapped on the harness and control unit.

Translation (I-9-c.f): Après quelques minutes de formation, le correspondant d'Au fil du rail s'est accroché le boîtier Lococommande *à la taille*.

This addition is interesting in that it reveals the translator's in-depth, inside knowledge of company events and activities. Yet, in addition to revealing the translator's knowledge, this type of addition also reveals her judgement of the original and the writer of the original. Specifically, the translator thought something was lacking in the original and corrected that lack in her translation. Yet these changes were not then made in the original.

Still other additions added completely new elements or ideas to the translations.

Two examples follow.

Addition which adds new material — Example 1

Original (I-1-a.e): "I have not come to this point to preside over the end of the railways in Eastern Canada. I want to see them strengthened in an orderly way, re-shaped to thrive in the Eastern marketplace."

Translation (I-1-a.f): " Je ne suis pas ici pour présider à la disparition des chemins de fer dans l'Est du Canada. Au contraire. Je veux qu'ils reprennent des forces afin qu'une fois remodelés, ils puissent *survivre* et prospérer dans l'Est."

In this first example, the addition serves to make the translation somewhat more negative and to emphasize the situation of the railways. Not only to they need to thrive, they must first survive. Once again, the translator would appear to be more pessimistic than the writer or, perhaps, more honest about the true situation of Canada's freight railways.

Addition which adds new material — Example 2

Original (I-8-c.e): Mr. Tellier believes that employee compensation should be linked to financial results. And now that CN's financial results are finally reflecting the fruits of our labor, he has announced that 1995 will bring about the implementation of a new incentive plan covering all non-schedule and management employees. "The plan is based on a number of performance indicators and reflects the future direction regarding compensation for a non-schedule employees," he said.

Translation (I-8-c.f): M. Tellier estime que la rémunération du personnel doit être étroitement liée aux résultats financiers de la Compagnie. Il a donc annoncé la mise en oeuvre, en 1995, d'un régime d'intéressement à l'intention de tous les membres du personnel cadre et non syndiqué. *«Votre rémunération sera en rapport direct avec le rendement de l'entreprise, a-t-il précisé. Établie en fonction d'un certain nombre d'indicateurs de rendement normalisés au sein de l'industrie, ce régime traduit bien notre orientation future en matière de rémunération du personnel non syndiqué.»*

This particular text segment contains two additions, both of which add new material to the text. Both additions are rather striking since nowhere is that material contained in the original article. Once again, the translator reveals that she has or has obtained additional information about what is going on within the company. At the same time, the first addition also is a very direct comment on salaries and how they will be determined, much more direct than the material in the original.

Finally, there are text segments which contain multiple additions. Although each individual addition could be considered relatively harmless to the meaning of the text, the occurrence of multiple additions does serve to effectively change meaning.

Multiple additions in one segment — Example

Original (I-9-a.e): We are reengineering the company structure, remodelling a number of our internal services, and reestablishing our stronghold as a serious contender; all in an effort to meet the demands of our customers.

Translation (I-9-a.f): Et c'est afin de mieux répondre aux exigences de notre clientèle que nous revoyons de fond en comble la structure de notre entreprise, que nous nous affirmons, jour après jour, comme un transporteur de choix et un concurrent de taille.

In this example, the addition of “mieux” serves to soften the statement better — the company needs to meet the needs of its customers better, not just to meet them at all. This addition makes the tone of the text more positive. So does the addition of “un transporteur de choix”. Not only will CN compete, but they will do it successfully. The third addition, “jour après jour” also adds to this positive tone, emphasizing the ongoing and continuous nature of the efforts being made.

Another element which contributed to the length of the translation was the number of times which the translator added material to clarify the meaning of the original. Clarification added was treated as a separate category than additions, since the material being added was not new, merely explanatory in nature. Specifically, clarification was added to all of the translations, with the frequency of these additions ranging from two to 21 and with an average of five such segments per translation. The statistics are provided in the following table.

Article	Frequency
I-1-a.f	3
I-1-c.f	8
I-2-a.f	3
I-2-c.f	14
I-3-a.f	7
I-3-c.f	2
I-4-a.f	4
I-4-c.f	5
I-5-a.f	5
I-5-c.f	16
I-6-a.f	2
I-6-c.f	21
I-7-a.f	1
I-7-c.f	7
I-8-a.f	1
I-8-c.f	1
I-9-a.f	1
I-9-c.f	4
Total	105

Table 3: *Keeping Track / Au fil
du rail* — Clarifications

In both of the examples provided below, the translator has taken pains to add explanatory or clarifying material.

Clarification added — Example 1

Original (I-9-c.e): With its unsafe command override, synthesized audio status updates and other features, Beltpack is designed for safety as well as versatility.

Translation (I-9-c.f): La Lococommande possède une fonction qui suspend ou invalide les commandes dangereuses *exécutées par l'utilisateur*, un système audio qui prévient automatiquement l'utilisateur en cas de problèmes ou dangers, de même que d'autres caractéristiques. Le système est axé autant sur la sécurité que sur la polyvalence.

In this first example, the translator has taken pains to indicate who gives the unsafe command.

Clarification added — Example 2

Original (I-7-c.e): Another key element to its fast and easy service is that the Auburn Terminal will lie within two miles of a major artery, Maine Interstate 495.

Translation (I-7-c.f): Un autre grand avantage du terminal Auburn est le fait qu'il sera situé à moins de deux milles d'une importante artère routière : l'autoroute 495, *qui traverse l'État tout entier*.

In this second example, faced with the difficult of rendering "Interstate" in French, the translator opted not to simply label it as a highway ("autoroute"), but to provide a description clearly indicating that this particular highway crosses the state.

In terms of the content, the most surprising observation of all was the number of mistranslations made by the translator. This particular vehicle was translated by a freelance translator who had worked for CN's Linguistic Services prior to going freelance. From conversations with the staff working in CN's head office Public Affairs department, I learned that they preferred to use the services of this freelance translator for this type of work since they believed that the translators working for the firm's Linguistic Services department did not understand the requirements of translating materials needed to communicate with employees, that they were unable to translate newspaper writing

style properly, and that their level of writing was generally too high for the readership of the newspaper. The work done by this freelance translator was then revised by the in-house Francophone employee responsible for overseeing the production of the French-language newspaper. Given the fact that the freelancer was familiar with both CN's Linguistic Services and Public Affairs departments and was revised by the individual responsible for the French-language version of the vehicle, it is quite surprising that a total of 191 mistranslations were observed. Every single translation contained mistranslations, with the frequency varying from two to 32 per translation and with an average of ten per translation. The statistics are provided in the following table.

Article	Frequency
I-1-a.f	7
I-1-c.f	32
I-2-a.f	6
I-2-c.f	11
I-3-a.f	5
I-3-c.f	13
I-4-a.f	9
I-4-c.f	10
I-5-a.f	12
I-5-c.f	2
I-6-a.f	8
I-6-c.f	18
I-7-a.f	14
I-7-c.f	16
I-8-a.f	11
I-8-c.f	3
I-9-a.f	8
I-9-c.f	6
Total	191

Table 4: *Keeping Track / Au fil du rail* — Mistranslations

Mistranslation — Example 1

Original (I-9-c.e): That permits constant *leading-end* control of the movement.

Translation (I-9-c.f): On conserve ainsi la maîtrise du déplacement en tout temps, *quel que soit le sens de ce dernier*.

This is a perfect example of a translation which is incorrect. The English original refers to “leading-end control”, which refers to the front end of the train, whereas the translation specifically says that the train can be controlled regardless of the direction.

Mistranslation — Example 2

Original (I-9-c.e): With the Beltpack speed set at 1 mph, two freight cars were coupled *with minimal impact*.

Translation (I-9-c.f): Après sélection d’une vitesse de 1 mille à l’heure au pupitre Lococommande, deux wagons marchandises ont été attelés *à peu près sans bruit*.

In this case, the mistranslation is quite curious. It is true, as stated in the French, that the two cars were coupled with very little noise. However, the problem with coupling cars at a hump yard is the impact of the moving car (which is pushed down a hill, or “hump”, as it is called) hitting the stationary car, which may result in damage to the merchandise carried in the car, and noise is of little consequence. This particular mistranslation may reveal a certain ignorance on the part of the translator of railway operations and the problems of such operations.

Mistranslation — Example 3

Original (I-9-a.e): We’ve placed orders for the purchase of new and remanufactured locomotives.

Translation (I-9-a.f): De nouvelles locomotives ont été commandées, d’autres sont remises à neuf.

This, too, is a most curious mistranslation. The English original clearly indicates that both new and remanufactured locomotives are ordered from outside firms whereas the French translation would appear to imply that new cars are purchased from another firm while the remanufactured locomotives are from an internal source. In this case,

either the translator did the research and knew the locomotives were being remanufactured at one of CN's facilities, or she presumed that all remanufactured locomotives came from an internal facility which, although this was once true, was no longer true by the time this article was written.

Although occurrences of the remaining nine elements in the content category were both far less numerous and frequent, they do provide some insight as to the translator's strategy. Two of the most interesting elements noted in the corpus analysis concern errors and corrections made with respect to the content. Neither errors nor corrections were numerous. In fact, a total of four corrections were made with respect to the content. These corrections occurred in articles I-1-a.f, I-1-c.f, I-3-c.f, and I-9-c.f. It is significant that when a correction was made in the content, a similar correction was not always made in the original, despite the fact that, in their responses to the translator interview, the translators all stated that they both made corrections and informed the writer about such corrections. Unfortunately it is impossible to determine whether the correction was not made in the original because the translator did not inform the person in charge of the English newspaper or because that individual disregarded the information provided by the translator.

Correction in content — Example

Original (I-5-a.f): Revisions to work rules, *such as elimination on the times that shifts can be started*, or the ability to use part-time employees, will allow Intermodal to deploy its trained personnel in a more productive and cost-efficient manner.

Translation (I-5-a.e): Les modifications apportées aux règles régissant l'exécution du travail, *comme l'assouplissement des heures de prise de service* ou la possibilité de faire appel à des temps partiels, permettront aussi aux Services intermodaux de déployer leurs effectifs d'un manière plus productive et rentable.

At the same time, a total of three errors were made with respect to the content; these errors occurred in articles I-1-c.f, I-3-c.f, and I-8-a.f.

Error in content — Example

Original (I-8-a.e): Net income for the nine-month period ending September 30, 1994 amounted to *\$186* million compared with a net loss of \$41 million in the corresponding period of 1993.

Translation (I-8-a.f): Le bénéfice net pour la période de neuf mois close le 30 septembre 1994 s'est élevé à *\$188* M\$ par opposition à une perte nette de 41 M\$ à pareille date en 1993.

Still other changes which the translator made affected the tone of the original message, making it either more positive or more negative than the original. This type of change did not occur as frequently as omissions, additions or mistranslations. In fact, a total of 23 such changes occurred: in nine cases the tone was more positive and in 16 the tone was more negative. The statistics are provided first, followed by examples.

Article	Frequency
I-1-a.f	1
I-1-c.f	1
I-2-a.f	--
I-2-c.f	--
I-3-a.f	1
I-3-c.f	1
I-4-a.f	--
I-4-c.f	--
I-5-a.f	1
I-5-c.f	1
I-6-a.f	1
I-6-c.f	--
I-7-a.f	--
I-7-c.f	1
I-8-a.f	1
I-8-c.f	--
I-9-a.f	--
I-9-c.f	--
Total	9

Table 5: *Keeping Track / Au fil du rail* —
Change in tone (more negative)

Article	Frequency
I-1-a.f	--
I-1-c.f	1
I-2-a.f	--
I-2-c.f	--
I-3-a.f	1
I-3-c.f	1
I-4-a.f	1
I-4-c.f	--
I-5-a.f	2
I-5-c.f	3
I-6-a.f	3
I-6-c.f	1
I-7-a.f	--
I-7-c.f	3
I-8-a.f	--
I-8-c.f	--
I-9-a.f	2
I-9-c.f	--
Total	16

Table 6: *Keeping Track / Au fil du rail* —
Change in tone (more positive)

Change in tone (more positive) — Example

Original (I-7-c.e): Though intermodal service will never replace long distance hauling, the Auburn Terminal offers a timely alternative.

Translation (I-7-c.f): Et le terminal Auburn offre une solution efficace et rapide.

In this example, a quick and efficient solution (“solution efficace et rapide”) is more positive than a “timely alternative”.

Change in tone (more negative) — Example

Original (I-5-c.e): *The successes of the past* prove that asset sharing can work.

Translation (I-5-c.f): En effet, *l'expérience passée* démontre clairement que le partage des installations est non seulement faisable, mais profitable.

In this example, past experience (“expérience passée”) is not quite as positive as past successes.

There were also instances in which the translation was either more or less specific than the original. What is interesting with respect to this element is the disparity in the number of occurrences. Specifically, on six occasions, the translation was less specific than the original whereas on 26 occasions, the translation was more specific. The statistics are provided below, followed by examples.

Article	Frequency
I-1-a.f	1
I-1-c.f	1
I-2-a.f	2
I-2-c.f	1
I-3-a.f	--
I-3-c.f	--
I-4-a.f	--
I-4-c.f	--
I-5-a.f	--
I-5-c.f	--
I-6-a.f	--
I-6-c.f	--
I-7-a.f	--
I-7-c.f	--
I-8-a.f	1
I-8-c.f	--
I-9-a.f	--
I-9-c.f	--
Total	6

Table 7: *Keeping Track / Au fil du rail* —
Translation less specific

Article	Frequency
I-1-a.f	7
I-1-c.f	10
I-2-a.f	4
I-2-c.f	1
I-3-a.f	--
I-3-c.f	--
I-4-a.f	--
I-4-c.f	--
I-5-a.f	4
I-5-c.f	--
I-6-a.f	--
I-6-c.f	--
I-7-a.f	--
I-7-c.f	--
I-8-a.f	--
I-8-c.f	--
I-9-a.f	--
I-9-c.f	--
Total	26

Table 8: *Keeping Track / Au fil du rail* —
Translation more specific

Translation more specific - Example

Original (I-5-a.e): *All this* has been accomplished without the need for Intermodal's current employees to make concessions in the areas of wages and benefit protections.

Translation (I-5-a.f): *Tous ces progrès* ont pu être accomplis sans que les membres actuels des Services intermodaux n'aient eu à faire des concessions sur le plan du salaire ou des avantages sociaux.

Translation less specific — Example

Original I-2-a.e: Over the last couple of months, we have been working very hard at setting up *a series of objectives* based on our strategies to prosper.

Translation (I-2-a.f): Nous avons travaillé très fort ces derniers mois pour fixer *des objectives* qui nous permettront de combler les besoins de nos clients et d'atteindre la prospérité.

Likewise, there were also instances when the translation was either stronger or weaker than the original. Here, too, there was a disparity in the number of occurrences, the translation being stronger than the original on 28 occasions and weaker than the original on 13 occasions. Once again, the statistics are provided first, followed by examples.

Article	Frequency
I-1-a.f	4
I-1-c.f	1
I-2-a.f	2
I-2-c.f	6
I-3-a.f	4
I-3-c.f	1
I-4-a.f	--
I-4-c.f	--
I-5-a.f	--
I-5-c.f	1
I-6-a.f	--
I-6-c.f	3
I-7-a.f	--
I-7-c.f	3
I-8-a.f	2
I-8-c.f	1
I-9-a.f	--
I-9-c.f	--
Total	28

Table 9: *Keeping Track / Au fil du rail* — Translation stronger

Article	Frequency
I-1-a.f	2
I-1-c.f	1
I-2-a.f	--
I-2-c.f	--
I-3-a.f	1
I-3-c.f	--
I-4-a.f	--
I-4-c.f	--
I-5-a.f	--
I-5-c.f	--
I-6-a.f	3
I-6-c.f	--
I-7-a.f	4
I-7-c.f	1
I-8-a.f	--
I-8-c.f	--
I-9-a.f	--
I-9-c.f	--
Total	13

Table 10: *Keeping Track / Au fil du rail* — Translation weaker

Translation stronger — Example

Original (I-8-c.e): Almost 18 months have passed since CN *began to focus* on its turnaround strategy of reducing costs, increasing financial results and improving the level of customer service.

Translation (I-8-c.f): Il y a presque 18 mois que le CN *a adopté* sa stratégie de revirement.

Translation weaker — Example

Original (I-6-a.e): *If nothing else, the merger discussions have made everyone* -- employees, our customers, the public and the government -- more aware of the problems the Canadian rail industry faces in the form of taxes, tough competition with truckers and other railways, and oversized track networks.

Translation (I-6-a.f): *Les pourparlers de fusion auront eu comme effet*, entre autres, de sensibiliser davantage le personnel, notre clientèle, le public et le gouvernement aux problèmes du secteur ferroviaire canadien : fiscalité, vive concurrence provenant des entreprises de camionnage et des autres réseaux ferroviaires, et voies en surnombre.

Finally, there was also one element in the content category which was relatively minor in nature. This concerns the use of honorifics such as Mr., Mrs., Ms., and Miss. It was a policy in the head office Public Affairs department which produced *Keeping Track / Au fil du rail*, that honorifics were never to be used when referring to any CN employee other than the President and CEO, P.M. Tellier. It would appear that the French translator was not entirely in agreement with this since honorifics were added to names a total of 13 times in six different articles: I-1-c.f (once), I-2-c.f (six times), I-4-c.f (once), I-6-c.f (three times), I-7-c.f (once) and I-9-c.f (once).

b) Style

The second category studied was style. The occurrences of the 13 elements coded in the category were not as numerous as those in the content category, with a total of 176 translation segments coded. The most commonly noted elements were: image added / image deleted, repetition added / repetition deleted, style less formal / style more formal and change in point of view.

Images were both added to and deleted from the translations. This did not occur with any great frequency, and images were deleted more frequently than they were added.

Statistics and examples follow.

Article	Frequency
I-1-a.f	1
I-1-c.f	5
I-2-a.f	2
I-2-c.f	1
I-3-a.f	--
I-3-c.f	--
I-4-a.f	--
I-4-c.f	--
I-5-a.f	--
I-5-c.f	--
I-6-a.f	1
I-6-c.f	1
I-7-a.f	--
I-7-c.f	--
I-8-a.f	--
I-8-c.f	--
I-9-a.f	--
I-9-c.f	1
Total	12

Table 11: *Keeping Track / Au fil du rail* — Image added

Article	Frequency
I-1-a.f	--
I-1-c.f	4
I-2-a.f	1
I-2-c.f	1
I-3-a.f	3
I-3-c.f	--
I-4-a.f	--
I-4-c.f	--
I-5-a.f	--
I-5-c.f	--
I-6-a.f	--
I-6-c.f	5
I-7-a.f	--
I-7-c.f	2
I-8-a.f	--
I-8-c.f	--
I-9-a.f	1
I-9-c.f	2
Total	19

Table 12: *Keeping Track / Au fil du rail* — Image deleted

Image added — Example

Original (I-9-c.e): CN's Beltpack® locomotive remote-control unit is only a little bigger than the average toy train engine. However, that 6.5-lb. box unlocks 1800 h.p. of yard-engine pulling (or pushing) power.

Translation (I-9-c.f): Le train jouet de votre enfance serait-il soudain devenue réalité? Le boîtier de la Lococommande® de CN, à peine plus gros que celui que vous manipulez tout petit, peut aujourd'hui déplacer des *mastodontes* de 1 800 chevaux-vapeur.

This particular example demonstrates how unfortunate adding images can be, in terms of the meaning or impression created by a text. In an apparent effort to emphasize the size of the locomotives being operated through the remote-control unit, the translator also made it sound as if the motive power in question was old — a completely inaccurate portrayal of this equipment, much of which contains leading-edge technology such as on-board computer systems.

Image deleted — Example

Original (I-9-c.e): The Beltpack "*pitch and catch*" enables each of two ground employees to operate a control unit, but only one at a time. That permits constant leading-end control of the movement. Either operator can issue safety commands at any time.

Translation (I-9-c.f): *Une fonction de transfert* permet à deux utilisateurs au sol de se passer les commandes (un seul à la fois pilotant la locomotive). On conserve ainsi la maîtrise du déplacement en tout temps, quel que soit le sens de ce dernier. Et même si un conducteur utilise toutes les fonctions du pupitre, l'autre peut déclencher en tout temps les dispositifs de sécurité prévus.

The articles published in *Keeping Track / Au fil du rail*, were frequently filled with highly descriptive language and numerous images. However, sometimes in translation, it was not possible to translate these images. In this particular example, the

translator replaced the image (“pitch and catch”) with an explanation, possibly making the text easier to understand while making the language more neutral.

In a similar manner, repetition was both added and deleted. This occurred more frequently than the addition and deletion of images. Furthermore, repetition was deleted more frequently than it was added. Statistics and examples follow.

Article	Frequency
I-1-a.f	1
I-1-c.f	2
I-2-a.f	3
I-2-c.f	--
I-3-a.f	--
I-3-c.f	--
I-4-a.f	1
I-4-c.f	1
I-5-a.f	2
I-5-c.f	--
I-6-a.f	--
I-6-c.f	1
I-7-a.f	1
I-7-c.f	--
I-8-a.f	--
I-8-c.f	--
I-9-a.f	--
I-9-c.f	--
Total	12

Table 13: *Keeping Track / Au fil du rail* — Repetition added

Article	Frequency
I-1-a.f	2
I-1-c.f	1
I-2-a.f	2
I-2-c.f	1
I-3-a.f	--
I-3-c.f	--
I-4-a.f	--
I-4-c.f	2
I-5-a.f	--
I-5-c.f	2
I-6-a.f	1
I-6-c.f	2
I-7-a.f	--
I-7-c.f	1
I-8-a.f	1
I-8-c.f	--
I-9-a.f	5
I-9-c.f	--
Total	20

Table 14: *Keeping Track / Au fil du rail* — Repetition deleted

Repetition added — Example

Original (I-7-a.e): But none of us should ever forget that we work on these things for one reason: to deliver quality customer service to our customers.

Translation (I-7-a.f): Mais aucun d'entre nous ne doit jamais oublier *la raison d'être* de son travail. *Et cette raison*, c'est la prestation d'un service de qualité.

This particular repetition would appear totally superfluous, particularly when there was an expressed concern (whether valid or not) that the French texts were frequently too long.

Repetition deleted — Example

Original (I-5-c.e): The locomotives are **black**. They're black not because they're dirty, but because these locomotives bear the Norfolk southern colours.

Translation (I-5-c.f): Les locomotives sont noires, non pas parce qu'elles sont sales, mais plutôt parce que cette couleur fait partie intégrante de la livrée des locomotives du Norfolk Southern (NS).

In this particular example, there are two repetitious segments in the original, neither of which are rendered in the translation. In this instance, the translator would appear to be improving on the style of the original which is unnecessarily repetitious.

A more significant observation was noted with respect to both style less formal /style more formal. Specifically, on numerous occasions, the style of the translation is more formal than that of the original. The statistics are provided, followed by examples.

Article	Frequency
I-1-a.f	--
I-1-c.f	1
I-2-a.f	2
I-2-c.f	--
I-3-a.f	--
I-3-c.f	--
I-4-a.f	--
I-4-c.f	--
I-5-a.f	2
I-5-c.f	--
I-6-a.f	--
I-6-c.f	1
I-7-a.f	--
I-7-c.f	--
I-8-a.f	--
I-8-c.f	--
I-9-a.f	--
I-9-c.f	--
Total	6

Table 15: *Keeping Track / Au fil du rail* — Style less formal

Article	Frequency
I-1-a.f	3
I-1-c.f	19
I-2-a.f	11
I-2-c.f	8
I-3-a.f	6
I-3-c.f	--
I-4-a.f	5
I-4-c.f	--
I-5-a.f	2
I-5-c.f	3
I-6-a.f	6
I-6-c.f	3
I-7-a.f	--
I-7-c.f	--
I-8-a.f	1
I-8-c.f	--
I-9-a.f	--
I-9-c.f	--
Total	67

Table 16: *Keeping Track / Au fil du rail* — Style more formal

Style less formal — Example

Original (I-6-c.e) — Article Title: Process improvement: from philosophy to practice

Translation (I-6-c.f) — Article Title: Amélioration de nos façons de faire

Style more formal — Example

Original (I-6-c.e): How can this help us?

Translation (I-6-c.f): Mais en quoi agir sur ces secteurs nous rendra- t-il la tâche plus facile?

These changes in the formality of the writing style are significant. For the most part, the writing style of the English version of *Keeping Track / Au fil du rail* was deliberately informal, almost chatty. This was particularly true with respect to the President's column. It was not always consistent, however, as can be seen from article I-6-c.e which was highly formal in style. The number of occasions on which the style was rendered more formal is impressive.

Yet another stylistic change of significance concerned changes in point of view. This element was observed on fourteen occasions as follows: I-1-c.f (twice), I-2-a.f (four times), I-2-c.f (four times), I-3-a.f (three times), and I-3-c.f (once).

Change in point of view — Example

Original (I-3-c.e): Tellier reviews progress to date

Translation (I-3-c.f): La situation des femmes au CN : où en sommes-nous?

As the example shows, a change in point of view can be quite significant. In an article describing the meeting held on March 8, 1994 in honour of International Women's Day, the English title focusses on CN's president (a male) and his comments on the progress of women within the firm. The translation, on the other hand, focuses on CN's women. Changes such as this cannot be considered haphazard and would appear to

reflect an effort on the part of the translator to select a more appropriate point of view for the message or article.

The remaining elements in this category (style) occurred much less frequently. For instance, on three occasions (all in Article I-1-c.f) emphasis was added and on one occasion (I-3-a.f) emphasis was deleted. Examples follow.

Emphasis deleted — Example

Original (I-3-a.e): First, it needs the willingness of *each and every employee* to accept the fact that change is inevitable. And to actively seek out training that will increase the knowledge and skills you require to keep up with the demands of the job.

Translation (I-3-a.f): D'abord, *les employés* doivent reconnaître que le changement est inévitable et rechercher activement les programmes de formation qui viendront enrichir leurs connaissances et leurs compétences; ils sauront ainsi s'adapter aux nouvelles exigences de leur poste.

Emphasis added — Example

Original (I-1-c.e): I need to understand the people in our Marketing group and the other members of the organization.

Translation (I-1-c.f): *Personnellement*, j'ai encore beaucoup à apprendre sur le service du Marketing et les gens qui le composent.

Similarly, the translator occasionally either added or deleted word play. The writers of *Keeping Track / Au fil du rail* frequently used word plays which focussed on railway terms. An example is the title of the newspaper. However, word play was either added or deleted in roughly the same proportion. Specifically, word plays were added on five occasions in four translations (I-2-c.f - once; I-6-a.f - twice; I-7-c.f - once; I-9-a.f - once; and I-9-c.f - once) and deleted on three occasions (I-1-c.f; I-4-a.f; and I-6-a.f). As a

result, the effect of such changes were negligible and might, instead, indicate that the translator used word plays when she could and eliminated those that did not work in translation. Examples follow.

Word play added — Example

Original (I-9-c.e): The Beltpack system has been in place at Winnipeg's Symington humpyard since 1990, and testing is in progress at Toronto's MacMillan Yard.

Translation (I-9-c.f): Le système Lococommande est utilisé au triage à butte de Symington, à Winnipeg, et les tests *vont bon train* dans le triage MacMillan, à Toronto.

Word play deleted — Example 1

Original (I-6-a.e): It's critical that we get on the *right path* and *drive* our agenda quickly.

Translation (I-6-a.f): Il faut absolument que nous nous positionnons bien et que nous passions rapidement aux actes.

Word play deleted — Example 2

Original (I-1-c.e): The execution of our services is not what it should be. People are interested and concerned about *where the customer is going*, but the organization on a whole is not focused on the customer.

Translation (I-1-c.f): Au CN, le service n'est pas tout ce qu'il pourrait être. Individuellement, nos employés pensent aux intérêts de leurs clients, mais, globalement, l'entreprise n'est pas entièrement axée sur eux.

This second omission is interesting. This play on words ("where the customer is going") appears inadvertent and is quite unfortunate. The fact that the translator deleted it reveals that once again the translator is judging the quality of the original and possibly making a deliberate effort to improve the translation.

One final stylistic element of interest concerns the use of nonsexist or gender neutral language. At CN, the use of nonsexist language was an official policy, fostered

by the company's Equity and Linguistic Services departments. There was considerable complaint, from the Equity department, that the company publications produced by the railway's public affairs departments did not always respect the policy. It is interesting to note that on ten separate occasions in six articles the translator made a deliberate effort to add feminized versions of job titles: I-1-c.f (once); I-4-a.f (four times); I-5-c.f (once), I-8-a.f (twice); I-9-a.f (twice); and I-9-c.f (1). What is particularly interesting is that this usage was not consistent, even within a single paragraph.

Inconsistency in nonsexist usage —Example

Original (I-8-a.e): Account managers will not only be knowledgeable about our products and services, they will be entrepreneurs and problem solvers as well. The added benefit is that account managers will quickly become customer champions within CN.

Translation (I-8-a.f): Les *directeurs et directrices* de compte n'auront pas seulement une connaissance approfondie de leurs produits et services, mais *ils* assumeront également le rôle d'entrepreneurs, capables de résoudre tous les problèmes à mesure qu'ils se présentent. Ce faisant, *les directeurs* de compte se feront rapidement les défenseurs de leur clientèle au CN.

c) Readability

The third category studied has been called "readability" because the four elements in this category (translation clearer, translation less clear, translation more concise, and translation wordy) all affect the readability or understandability of the translations. A total of 55 text segments were coded in this category. Two elements in this category are of particular interest: translation clearer and translation less clear. On 27 occasions the translator's text is clearer than the original, whereas on only one occasion is it less clear. This would appear to indicate that the translator did make a definite effort to improve on

the quality of the text, while not always succeeding. The statistics are followed by examples.

Article	Frequency
I-1-a.f	--
I-1-c.f	10
I-2-a.f	1
I-2-c.f	3
I-3-a.f	--
I-3-c.f	--
I-4-a.f	--
I-4-c.f	--
I-5-a.f	--
I-5-c.f	4
I-6-a.f	2
I-6-c.f	1
I-7-a.f	--
I-7-c.f	2
I-8-a.f	--
I-8-c.f	--
I-9-a.f	1
I-9-c.f	3
Total	27

Table 17: *Keeping Track / Au fil du rail* — Translation clearer

Article	Frequency
I-1-a.f	--
I-1-c.f	1
I-2-a.f	--
I-2-c.f	--
I-3-a.f	--
I-3-c.f	--
I-4-a.f	--
I-4-c.f	--
I-5-a.f	--
I-5-c.f	--
I-6-a.f	--
I-6-c.f	--
I-7-a.f	--
I-7-c.f	--
I-8-a.f	--
I-8-c.f	--
I-9-a.f	--
I-9-c.f	--
Total	1

Table 18: *Keeping Track / Au fil du rail* — Translation less clear

Translation clearer — Example

Original (I-6-a.e): If nothing else, the merger discussions have made everyone— employees, our customers, the public and the government — more aware of the problems the Canadian rail industry faces in the form of taxes, tough competition with truckers and railways, and **oversized track networks**.

Translation (I-6-a.f): Les pourparlers de fusion auront eu comme effet, entre autres, de sensibiliser davantage le personnel, notre clientèle, le public et le gouvernement aux problèmes du secteur ferroviaire canadien : fiscalité, vive concurrence provenant des entreprises de camionnage et des autres réseaux ferroviaires, et **voies en surnombre**.

With this type of text manipulation, the translator has translated what the writer meant rather than what he/she actually wrote.

Translation less clear — Example

Original (I-1-c.e): NAFTA will make the north-south traffic flows more important than they have been in the past. *Some of our industries are going to have a tougher time competing. Some will complete very effectively.*

Translation (I-1-c.f): Pour nous, l'ALÉNA se trouvera à accentuer le trafic dans l'axe nord-sud et à compliquer l'existence de certaines de nos industries. *Certaines auront plus de mal à tirer leur épingle du jeu, alors que d'autres y excelleront.*

Yet, as this second example shows, the translation was occasionally less clear than the original.

The remaining two elements, translation more concise and translation wordy, also indicate efforts on the part of the translator to improve on the original, once again not necessarily with success. The statistics are provided, followed by examples.

Article	Frequency
I-1-a.f	--
I-1-c.f	--
I-2-a.f	3
I-2-c.f	--
I-3-a.f	--
I-3-c.f	2
I-4-a.f	--
I-4-c.f	--
I-5-a.f	--
I-5-c.f	--
I-6-a.f	--
I-6-c.f	3
I-7-a.f	--
I-7-c.f	2
I-8-a.f	--
I-8-c.f	--
I-9-a.f	--
I-9-c.f	--
Total	10

Table 19: *Keeping Track / Au fil du rail* — Translation more concise

Article	Frequency
I-1-a.f	--
I-1-c.f	4
I-2-a.f	2
I-2-c.f	1
I-3-a.f	3
I-3-c.f	--
I-4-a.f	2
I-4-c.f	1
I-5-a.f	--
I-5-c.f	--
I-6-a.f	--
I-6-c.f	3
I-7-a.f	--
I-7-c.f	1
I-8-a.f	--
I-8-c.f	--
I-9-a.f	--
I-9-c.f	--
Total	17

Table 20: *Keeping Track / Au fil du rail* — Translation wordy

Translation more concise — Example

Original (I-3-c.e): Mr. Tellier did not hide the fact that he himself was not satisfied with the progress in these areas.

Translation (I-3-c.f): M. Tellier n'a pas caché que ces progrès ne le satisfaisaient pas.

Translation wordy — Example

Original (I-6-c.e): If a chain is only as strong as its weakest link, then our process is just as good as its weakest hand off.

Translation (I-6-c.f): Si l'on dit d'une chaîne qu'elle n'est aussi forte que le plus faible de ses maillons, alors on peut dire de la même façon d'un processus d'acheminement qu'il n'est aussi fort que le plus faible de ses éléments.

d) Structure

The fourth category studied was structure. The manipulations noted in this category concerned the agent (or agents) of various activities, person, paragraphs, and quotations. A total of 106 text segments were coded in this category. Although none of the elements observed occurred with any overwhelming frequency, contrary to the case of additions, omissions and mistranslations, they are indicative of the translator's willingness to make changes.

First, with respect to the agent (or agents) of various activities, the translator both added agents, changed the agent of an activity or eliminated the agent. The statistics are provided first, followed by examples.

Article	Frequency
I-1-a.f	4
I-1-c.f	1
I-2-a.f	1
I-2-c.f	--
I-3-a.f	--
I-3-c.f	--
I-4-a.f	--
I-4-c.f	--
I-5-a.f	--
I-5-c.f	--
I-6-a.f	1
I-6-c.f	6
I-7-a.f	--
I-7-c.f	--
I-8-a.f	--
I-8-c.f	--
I-9-a.f	--
I-9-c.f	1
Total	14

Table 21: *Keeping Track / Au fil du rail* — Agent added

Article	Frequency
I-1-a.f	--
I-1-c.f	2
I-2-a.f	--
I-2-c.f	--
I-3-a.f	1
I-3-c.f	--
I-4-a.f	--
I-4-c.f	--
I-5-a.f	--
I-5-c.f	--
I-6-a.f	--
I-6-c.f	--
I-7-a.f	--
I-7-c.f	1
I-8-a.f	1
I-8-c.f	--
I-9-a.f	--
I-9-c.f	1
Total	6

Table 22: *Keeping Track / Au fil du rail* — Agent changed

Article	Frequency
I-1-a.f	2
I-1-c.f	4
I-2-a.f	1
I-2-c.f	1
I-3-a.f	1
I-3-c.f	--
I-4-a.f	--
I-4-c.f	--
I-5-a.f	--
I-5-c.f	--
I-6-a.f	1
I-6-c.f	1
I-7-a.f	2
I-7-c.f	1
I-8-a.f	--
I-8-c.f	--
I-9-a.f	--
I-9-c.f	--
Total	14

Table 23: *Keeping Track / Au fil du rail* — Agent removed

Agent added — Example

Original (I-6-c.e): The customers need their goods delivered safely and on time.

Translation (I-6-c.f): *En ce qui nous concerne*, nos clients attendent *de nous* que *nous* *acheminons* leurs produits sans les endommager et dans les délais convenus.

The addition of the agent in this example serves to add emphasis and to clarify exactly who the text is talking about. The translator has, in fact, switched from a generic group of clients who need their goods on time to specific clients (CN's) who specifically need CN to deliver their goods on time. In this case, the translator is once again obviously trying to improve on the text.

Agent changed — Example

Original (I-9-c.e): *According to Johnstone*, Beltpack has been described as the most significant rail industry development since the diesel engine.

Translation (I-9-c.f): *Selon certains*, le système Lococommande constitue le plus important développement de l'industrie ferroviaire depuis l'avènement du diesel.

Agent removed — Example

Original (I-7-c.e): *According to Dan LeBlanc*, the customers are already biting.

Translation (I-7-c.f): Et les clients cognent déjà à la porte.

These two examples are a little unusual. In both cases, the identity of the person being interviewed is hidden. In the first example, where the agent is switched from an individual to several people, the effect is to give more weight to the statement. The second example adds similar emphasis, with the information being presented as a fact, rather than an individual's opinion. Both of these examples, as well, could be construed as efforts on the part of the translator to improve the text.

The translator also made changes with respect to person. Although these changes occurred in four different directions (1st to 3rd, 2nd to 1st, 2nd to 3rd, and 3rd to 1st),

they occurred much more frequently in two directions (1st to 3rd and 3rd to 1st). The statistics are provided, followed by examples.

Article	Frequency
I-1-a.f	3
I-1-c.f	8
I-2-a.f	2
I-2-c.f	--
I-3-a.f	--
I-3-c.f	--
I-4-a.f	2
I-4-c.f	--
I-5-a.f	--
I-5-c.f	--
I-6-a.f	2
I-6-c.f	--
I-7-a.f	1
I-7-c.f	--
I-8-a.f	1
I-8-c.f	1
I-9-a.f	3
I-9-c.f	--
Total	23

Table 24: *Keeping Track / Au fil du rail* — Change in person (1st -3rd)

Article	Frequency
I-1-a.f	--
I-1-c.f	2
I-2-a.f	--
I-2-c.f	--
I-3-a.f	--
I-3-c.f	--
I-4-a.f	--
I-4-c.f	--
I-5-a.f	--
I-5-c.f	--
I-6-a.f	--
I-6-c.f	--
I-7-a.f	--
I-7-c.f	--
I-8-a.f	--
I-8-c.f	--
I-9-a.f	--
I-9-c.f	--
Total	2

Table 25: *Keeping Track / Au fil du rail* — Change in person (2nd-1st)

Article	Frequency
I-1-a.f	--
I-1-c.f	--
I-2-a.f	2
I-2-c.f	1
I-3-a.f	1
I-3-c.f	--
I-4-a.f	--
I-4-c.f	--
I-5-a.f	--
I-5-c.f	--
I-6-a.f	--
I-6-c.f	--
I-7-a.f	--
I-7-c.f	--
I-8-a.f	--
I-8-c.f	--
I-9-a.f	--
I-9-c.f	--
Total	4

Table 26: *Keeping Track / Au fil du rail* — Change in person (2nd-3rd)

Article	Frequency
I-1-a.f	2
I-1-c.f	1
I-2-a.f	--
I-2-c.f	--
I-3-a.f	--
I-3-c.f	--
I-4-a.f	--
I-4-c.f	--
I-5-a.f	--
I-5-c.f	2
I-6-a.f	1
I-6-c.f	8
I-7-a.f	--
I-7-c.f	--
I-8-a.f	--
I-8-c.f	1
I-9-a.f	1
I-9-c.f	--
Total	16

Table 27: *Keeping Track / Au fil du rail* — Change in person (3rd-1st)

Change in person (1st-3rd) — Example

Original (I-1-c.e): In Marketing, *we* have to begin to play *our role* in shaping the direction of the organization and ensure that where *we take our capabilities* is for *our* customers' success in the late 90's.

Translation (I-1-c.f): *Le service du Marketing* doit jouer pleinement *son rôle* et orienter l'action de la Compagnie pour que, d'ici à la fin de la décennie, tous *ses gestes* concourent à la réussite de *ses clients*.

Changing from the first to third person increases neutrality or distance. In the case of the example provided, the article in question was an interview with the newly appointed senior vice-president of CN's Marketing department, to introduce him to the employees and explain his views of the department and where he planned to take it. It is interesting that the use of "we" and "our" in the original is very inclusive. The man being interviewed considers himself part of the department and plans to be involved in what goes on. In the translation, on the other hand, he refers to the Marketing department as if he were not a member, from the outside. This is an unfortunate change.

Change in person (2nd-1st) — Example

Original (I-1-c.e): *You* need to understand the marketplace *you're* playing in, what *our customers* have to do in that marketplace, and what *our competitors* are doing.

Translation (I-1-c.f): Il *nous* faut mieux comprendre les règles du jeu et ce que *nos* clients doivent faire pour rester dans le jeu, tout en gardant à l'oeil *nos* propres concurrents.

This second change in person, from 2nd to 1st, indicates a deliberate effort on the part of the translator to improve on the text. This example, is taken from the same article as the previous one. In the original, the individual interviewed switches from "you" (although a generic "you") to "our" in the same sentence. This inconsistency could have occurred because the original text is too close to the taped interview. It is the type of inconsistency which is found relatively frequently in spoken language. The translator,

appears to have felt that the writer of the original should have cleaned up the inconsistency a little and proceeded to do so in her text.

Change in person (2nd-3rd) — Example

Original (I-3-a.e): A change in our culture is going to be a learning process. We have to make this a company-wide shared preoccupation. What *you* should learn in training should be tied to our business goals and objectives.

Translation (I-3-a.f): Nous passerons nécessairement par une période d'apprentissage si nous voulons adapter notre culture d'entreprise. Nous devons tous, autant que nous sommes, partager la même préoccupation. Tout ce que *les employés* apprennent dans les programmes de formation doit être rattaché à nos objectifs d'entreprise.

This type of change is also of interest. In this example, taken from one of the president's columns, the translator has switched from the chatty tone created by the use of "you" to a more neutral "the employees" ("les employés").

Change in person (3rd-1st) — Example

Original (I-6-c.e): "No individual can succeed at satisfying the customer on their own," says Ayers. "*They* must be supported by good processes."

Translation (I-6-c.f): «Personne n'est en mesure de satisfaire, de lui-même, tous les besoins du client, dit M. Ayers. *Nous* devons pouvoir *nous* appuyer sur de bons processus.»

With this final type of change, neutrality or distance is removed. In this final example, the translator has switched from generic people who need good processes in order to satisfy their clients to the much more specific CN employees need good processes to satisfy their employees, using the inclusive "we" format.

The third element in this category concerned paragraphs. As stated in the statistical portion of this chapter, there were no truly significant differences in the number of paragraphs in the originals and the translations. However, this was not always as a result of a strict respect for the structure of the translation since this translator did both

combine and break up paragraphs. However, she did not do this with any great frequency and, what is interesting, she did it roughly the same number of times either way. It would appear, that she was switching information about from one paragraph to another adjacent paragraph, rather than redefining the paragraph structure of the text. The statistics are provided below.

Article	Frequency
I-1-a.f	--
I-1-c.f	4
I-2-a.f	--
I-2-c.f	--
I-3-a.f	1
I-3-c.f	--
I-4-a.f	--
I-4-c.f	--
I-5-a.f	--
I-5-c.f	--
I-6-a.f	--
I-6-c.f	2
I-7-a.f	--
I-7-c.f	3
I-8-a.f	--
I-8-c.f	1
I-9-a.f	--
I-9-c.f	1
Total	12

Table 28: *Keeping Track / Au fil du rail* — Paragraph broken up

Article	Frequency
I-1-a.f	--
I-1-c.f	--
I-2-a.f	1
I-2-c.f	2
I-3-a.f	1
I-3-c.f	--
I-4-a.f	1
I-4-c.f	1
I-5-a.f	1
I-5-c.f	--
I-6-a.f	--
I-6-c.f	2
I-7-a.f	--
I-7-c.f	--
I-8-a.f	1
I-8-c.f	--
I-9-a.f	--
I-9-c.f	--
Total	10

Table 29: *Keeping Track / Au fil du rail* — Paragraphs combined

Finally, the translator also made a few minor changes affecting quotes.

Specifically, on four occasions in two translations she used a quote as a statement: I-7-c-f (once), I-8-c.f (three times). She also turned a statement into a quote on one occasion.

e) Terminology

The fifth and final category studied concerned terminology. Five elements were identified in this category (company jargon not used, business jargon not used, complicated terminology used, specialized railway term added, and specialized railway term not used) and a total of 59 text segments were coded.

For the purposes of this study, “jargon” was used to refer to set expressions or phrases occurring frequently both within the company and within the business environment. Many of these expressions or phrases are used so repeatedly that they could almost be considered clichés. As part of the informal, chatty style used in the English version of *Keeping Track / Au fil du rail*, both company jargon and business jargon were tolerated. This use of jargon was not always duplicated in the translations. Statistics are provided, followed by examples.

Article	Frequency
I-1-a.f	--
I-1-c.f	5
I-2-a.f	--
I-2-c.f	--
I-3-a.f	--
I-3-c.f	--
I-4-a.f	--
I-4-c.f	--
I-5-a.f	3
I-5-c.f	1
I-6-a.f	1
I-6-c.f	--
I-7-a.f	--
I-7-c.f	1
I-8-a.f	--
I-8-c.f	--
I-9-a.f	--
I-9-c.f	--
Total	11

Table 30: *Keeping Track / Au fil du rail* — Company jargon not used

Article	Frequency
I-1-a.f	2
I-1-c.f	2
I-2-a.f	--
I-2-c.f	1
I-3-a.f	1
I-3-c.f	--
I-4-a.f	--
I-4-c.f	--
I-5-a.f	--
I-5-c.f	--
I-6-a.f	4
I-6-c.f	1
I-7-a.f	--
I-7-c.f	1
I-8-a.f	--
I-8-c.f	--
I-9-a.f	--
I-9-c.f	--
Total	11

Table 31: *Keeping Track / Au fil du rail* — Business jargon not used

Company jargon not used — Example 1

Original (I-7-c.e): But will this story have a happy ending? “From the very beginning,” affirmed Dan, “this has been *a grow the business* initiative. We expect not only to see more shipments from existing customers, but to see new customers come on board with this service — a service that will increase our revenues while providing a top-notch service to our customers.”

Translation (I-7-c.f): Une collaboration qui, selon M. Leblanc, est promise à un bel avenir. «Depuis le tout début, il s’agit *d’un projet de croissance*. Grâce à ce service, nous prévoyons obtenir plus de trafics de nos clients actuels, mais aussi élargir notre clientèle.

Nous serons en mesure d’augmenter nos recettes tout en rehaussant la qualité de nos prestations.»

Company jargon not used — Example 2

Original (I-6-a.e): We must focus on *growing our business*, on improving the way we do business, and on being competitive.

Translation (I-6-a.f): Nous devons penser *expansion commerciale*. Amélioration de nos pratiques commerciales et accroissement de notre compétitivité.

This example is particularly interesting. “Grow the business” was a fixed expression in English at CN, used to refer to any increase in sales and earnings. The expression was initially used in a head office Public Affairs department publication intended to explain to employees how CN intended to engineer a turnaround and become profitable. What is interesting, as shown in the two examples provided above, is that it was translated in a variety of ways in French, never by a fixed expression.

Business jargon not used — Example

Original (I-2-c.e): “One thing it’s going to take is leadership, where the leaders, to use a bromide, *walk the talk*. Vice-President Corporate Bob Walker and Dave Wilson, Vice-President of U.S. Operations, are sold on this concept. My role is to keep them wired to continue *walking the talk*.”

Translation (I-2-c.f): “Mais le succès de ce programme réside dans le leadership que nous exercerons. Bob Walker, vice-président général, et Dave Wilson, vice-président Exploitation des lignes américains, donnent leur entière adhésion au projet. Mon rôle est de les tenir sans cesse au courant pour obtenir leur soutien et leur leadership.”

In this example of business jargon, the cliché expression “walk the talk” is used twice. What is entertaining is that the individual being quoted clearly indicates that he is aware that he is using jargon. The translator used the more neutral concept of “leadership”. That is precisely the effect that eliminating jargon has: it makes the tone of the text more neutral.

The translator also occasionally used complicated language in her translations. This occurred on eleven occasions, in three translations (I-1-a.f, I-2-a.f, and I-6-c.f). It is of note that complicated terminology was used on seven occasions in one article (I-2-a.f, a management article. It is possible that the translator found the concepts in this article particularly difficult to translate. An example of the complicated terminology used is provided.

Complicated terminology used — Example

Original (I-6-c.e): Identifying these “disconnects”, or *problem areas*, is key.

Translation (I-6-c.f): L’identification de ces ruptures ou dysfonctionnements, comme on les appelle, constitue déjà un bonne partie de la solution.

Finally, a total of 15 text segments pertaining to the use of specialized railway terminology was coded. Specifically, on one instance a specialized railway term was added and on 14 occasions, specialized railway terminology was eliminated. The statistics are provided, followed by examples.

Article	Frequency
I-1-a.f	--
I-1-c.f	--
I-2-a.f	--
I-2-c.f	--
I-3-a.f	--
I-3-c.f	--
I-4-a.f	--
I-4-c.f	--
I-5-a.f	--
I-5-c.f	1
I-6-a.f	--
I-6-c.f	--
I-7-a.f	--
I-7-c.f	--
I-8-a.f	--
I-8-c.f	--
I-9-a.f	--
I-9-c.f	--
Total	1

Table 32: *Keeping Track / Au fil du rail* — Specialized railway term added

Article	Frequency
I-1-a.f	1
I-1-c.f	--
I-2-a.f	--
I-2-c.f	5
I-3-a.f	--
I-3-c.f	--
I-4-a.f	--
I-4-c.f	2
I-5-a.f	1
I-5-c.f	--
I-6-a.f	--
I-6-c.f	3
I-7-a.f	--
I-7-c.f	2
I-8-a.f	--
I-8-c.f	--
I-9-a.f	--
I-9-c.f	--
Total	14

Table 33: *Keeping Track / Au fil du rail* — Specialized railway term not used

Specialized railway terminology added — Example

Original (I-5-c.e): The train emerges and heads over CN tracks to Talbotville where it will haul away automobiles from the Ford automotive plant.

Translation (I-5-c.f): Le train qui émerge empruntera les lignes du CN à destination de l'usine de Ford de Talbotville où il prendra en charge des wagons porte-automobiles.

The single example where the translator added a specialized railway term (the name of the type of car used to haul the automobiles), is relatively minor. The segments in which the translator removed specialized railway terminology are more significant. Specifically, in the following example, there is a difference between “derailments” and “reportable” derailments. Not all derailments which occur, even those which occur on the main track, have to be reported to the government. As a result, the safety statistics discussed in this particular article look better in the translation.

Specialized railway terminology not used — Example

I-4-c.e (Original): CN North America experienced 19 *reportable* main track derailments in the first three months of this year.

I-4-c.f (Translation): Au cours des trois premiers mois de 1994, 19 *déraillements* sont survenus sur les voies principales de CN Amérique du Nord.

Combinations of elements found

In an effort to draw some meaning from this overwhelming amount of data (18 articles, 5 categories, 47 elements and 1,099 text segments coded), the various elements observed in each category were then examined in terms of the combinations noted. This served to provide a clearer view of what the translator was doing. Based on the types of elements observed in the corpus, six different hypotheses were drawn up in an effort to identify what was going on in the translations.

1. Changes were made with respect to content.
2. The style of the translation was either more or less neutral than that of the original.
3. The translation was either easier or harder to read than the original.

4. There were changes with respect to the level of the terminology used.
5. Structural changes were made.
6. The translator explicates or does not explicate when translating.

a) Hypothesis 1 - Content

The table provided on the following page summarizes the findings with respect to the content of the translations. To facilitate comprehension, certain similar categories were combined. Thus, change in tone includes both negative and positive changes, and errors and corrections made in the content were placed together as were translation segments which were more and less specific and translation segments which were weaker and stronger. As a result, nine element groups were analyzed. This table clearly indicates the overwhelming number of changes which occurred with respect to content. Of the 18 translations, one (I-1-c.f) contained all of the types of elements observed. The translations with the fewest content elements observed (I-4-a.f, I-4-c.f, I-8-c.f, I-9-a.f, I-9-c.f), still contained five of the nine content element groups. The average number per translation was six. Even more significant, all eighteen translations contained the four main elements observed in this category: additions, omissions, mistranslations and clarifications. The sheer number of the elements noted combined with the fact that over half of the types of elements observed were found in all of the translations and with the fact that four main elements were also found in all of the translations would appear to eliminate the possibility that this type of text manipulation is either accidental,

coincidental or haphazard. It would appear, instead, to be a deliberate strategy on the part of the translator.

Article	Elements Found								
	Additions	Omissions	Mis-translations	Clarification added	Change in tone (more positive or more negative)	Trans. less/more specific	Trans. weaker or stronger	Error / Correction in content	Honorific added
I-1-a.f	X	X	X	X	X	X	X	X	
I-1-c.f	X	X	X	X	X	X	X	X	X
I-2-a.f	X	X	X	X		X	X		
I-2-c.f	X	X	X	X		X	X		X
I-3-a.f	X	X	X	X	X		X		
I-3-c.f	X	X	X	X	X		X	X	
I-4-a.f	X	X	X	X	X				
I-4-c.f	X	X	X	X					X
I-5-a.f	X	X	X	X	X	X		X	
I-5-c.f	X	X	X	X	X		X		
I-6-a.f	X	X	X	X	X		X		
I-6-c.f	X	X	X	X	X		X		X
I-7-a.f	X	X	X	X			X		
I-7-c.f	X	X	X	X	X		X		X
I-8-a.f	X	X	X	X	X	X	X	X	
I-8-c.f	X	X	X	X			X		
I-9-a.f	X	X	X	X	X				
I-9-c.f	X	X	X	X					X

Table 34: *Keeping Track / Au fil du rail* — Elements affecting content

b) Hypothesis 2 - Style

In a similar manner, the elements coded were analyzed in combinations in order to determine if the translator chose to use a style which was either more or less neutral than that used in the original. The elements which could be indicative of a more neutral style include: emphasis deleted, repetition deleted, style less formal, image deleted, word play deleted, company jargon not used, business jargon not used, and specialized railway terminology not used. Those which could be indicative of a less neutral style include: emphasis added, repetition added, style more formal, image added, word play added, and specialized railway terminology used. As indicated in the tables provided on the next two pages, evidence of both options is available and no valid conclusion can be drawn as to whether the style chosen by the translator is more or less neutral than that of the original. What is obvious is that there is a certain amount of inconsistency with respect to the translations in question.

Article	Elements Found							
	Emphasis deleted	Repetition deleted	Style less formal	Image deleted	Word play deleted	Company jargon not used	Business jargon not used	Spec. railway term. not used
I-1-a.f		X					X	X
I-1-c.f		X	X	X	X		X	
I-2-a.f		X	X	X				
I-2-c.f		X		X			X	X
I-3-a.f	X			X			X	
I-3-c.f								
I-4-a.f					X			
I-4-c.f		X						X
I-5-a.f			X			X		X
I-5-c.f		X				X		
I-6-a.f		X					X	
I-6-c.f		X	X	X			X	X
I-7-a.f								
I-7-c.f		X					X	X
I-8-a.f		X						
I-8-c.f								
I-9-a.f		X						
I-9-c.f								

Table 35: *Keeping Track / Au fil du rail* — Elements indicative of a more neutral style

Article	Elements Found					
	Emphasis added	Repetition added	Style more formal	Image added	Word play added	Specialized railway term. used
I-1-a.f		X	X	X		
I-1-c.f		X	X	X		
I-2-a.f		X	X	X		
I-2-c.f			X	X	X	
I-3-a.f	X		X			
I-3-c.f						
I-4-a.f		X	X			
I-4-c.f		X				
I-5-a.f		X	X			
I-5-c.f			X			X
I-6-a.f			X	X	X	
I-6-c.f		X	X	X		
I-7-a.f						
I-7-c.f		X			X	
I-8-a.f			X			
I-8-c.f						
I-9-a.f					X	
I-9-c.f				X	X	

Table 36: *Keeping Track / Au fil du rail* — Elements indicative of a less neutral style

c) Hypothesis 3 - Readability

The third hypothesis examined concerned the readability of the translations. Since the data obtained through the calculation of the readability indices did not conclusively demonstrate a consistent effort on the part of the translator to improve readability in her translations, the combinations of codes were analyzed in an attempt to determine whether the elements observed could be used to support the data obtained

through the readability indices. The elements which would reduce readability include: complicated terminology, specialized railway terminology used, and translation less clear. Those which would increase readability include: business jargon not used, specialized railway terminology not used, translation clearer, and clarification added. As clearly indicated in Tables 37 and 38, there is little evidence that the translation is harder to read than the original and there is solid evidence of a deliberate and obvious effort on the part of the translator to make her translations more readable than the originals.

Article	Elements Found		
	Complicated terminology	Specialized railway term. used	Translation less clear
I-1-a.f	X		
I-1-c.f			X
I-2-a.f	X		
I-2-c.f			
I-3-a.f			
I-3-c.f			
I-4-a.f			
I-4-c.f			
I-5-a.f			
I-5-c.f		X	
I-6-a.f			
I-6-c.f			
I-7-a.f			
I-7-c.f			
I-8-a.f			
I-8-c.f			
I-9-a.f			
I-9-c.f			

Table 37: *Keeping Track / Au fil du rail* — Elements which reduce readability

Article			
	Business jargon not used	Specialized railway term. not used	Clarification added / Translation clearer
I-1-a.f	X	X	X
I-1-c.f	X		X
I-2-a.f			X
I-2-c.f	X	X	X
I-3-a.f	X		X
I-3-c.f			X
I-4-a.f			X
I-4-c.f		X	X
I-5-a.f		X	X
I-5-c.f			X
I-6-a.f	X		X
I-6-c.f	X	X	X
I-7-a.f			X
I-7-c.f	X	X	X
I-8-a.f			X
I-8-c.f			X
I-9-a.f			X
I-9-c.f			X

Table 38: *Keeping Track / Au fil du rail* — Elements which increase readability

d) Hypothesis 4 - Terminology

The fourth hypothesis concerned changes in terms of terminology. The elements which affect terminology include: company jargon not used, business jargon not used, specialized railway terminology not used, complicated terminology used, specialized railway terminology used. The first three elements serve to make the translation more neutral and possibly easier to understand, while the last two are less neutral and make the

translations more difficult to understand. It is obvious from Table 39, that there was an effort to make the terminology easier to understand.

Article					
	Company jargon not used	Business jargon not used	Specialized railway term. not used	Complicated term. used	Specialized railway term used
I-1-a.f		X	X		
I-1-c.f		X			
I-2-a.f					
I-2-c.f		X	X		
I-3-a.f		X			
I-3-c.f					
I-4-a.f					
I-4-c.f			X		
I-5-a.f	X		X		
I-5-c.f	X				X
I-6-a.f		X			
I-6-c.f		X	X	X	
I-7-a.f					
I-7-c.f		X	X		
I-8-a.f					
I-8-c.f					
I-9-a.f					
I-9-c.f					

Table 39: *Keeping Track / Au fil du rail* — Elements affecting terminology

e) Hypothesis 5 - Structure

Although the statistical analysis of the translations revealed little structural change in that the number of paragraphs and sentences in the translations were generally quite

similar to the numbers in the original, the comparison of the translations to the originals revealed more change in this respect. Specifically, the translator added, changed and removed the agents of activities, broke some paragraphs up and combined others, and used quotes as statements and statements as quotes. Although none of the elements was observed in any great quantities, the fact that most of the translations contained several of these elements combined is of interest.

Article	Elements Found										
	Agent added	Agent changed	Agent removed	Change in person (1st to 3rd)	Change in person (2nd to 1st)	Change in person (2nd to 3rd)	Change in person (3rd to 1st)	Paragraph broken up	Paragraphs combined	Quote used as statement	Statement used as quote
I-1-a.f	X		X	X			X				
I-1-c.f	X	X	X	X	X		X	X			
I-2-a.f	X		X	X		X			X		
I-2-c.f			X			X			X		
I-3-a.f		X	X			X		X	X		
I-3-c.f											
I-4-a.f				X					X		
I-4-c.f									X		
I-5-a.f									X		
I-5-c.f							X				
I-6-a.f	X		X	X			X				
I-6-c.f	X		X				X	X	X		
I-7-a.f		X	X	X							
I-7-c.f		X	X					X		X	
I-8-a.f		X		X					X		
I-8-c.f				X			X	X		X	X
I-9-a.f				X			X				
I-9-c.f	X	X						X			

Table 40: *Keeping Track / Au fil du rail* — Elements affecting structure

f) Hypothesis 6 - Explication

Finally, the combinations of elements were examined in order to determine whether there was an effort on the part of the translator to explicate. The elements which would lead to a conclusion that the translator does explicate include: correction made in content, translation more specific, translation stronger, repetition added, emphasis added, translation more concise, agent added, clarification added and translation clearer. The elements which would mitigate against any such conclusion include: error made in content, translation less specific, translation weaker, emphasis deleted, translation word, agent deleted and translation less clear. Once again, as can be seen from Tables 41 and 42 on the following pages, the data does not point strongly in either direction, with evidence of both explication on the part of the translator as well as a lack thereof.

Article	Elements Found									
	Correction made in content	Trans, more specific	Trans. stronger	Repetition added	Emphasis added	Trans. more concise	Agent added	Clarifi. added	Trans. clearer	
1-1-a.f	X	X	X	X			X	X		
1-1-c.f		X	X	X	X		X	X	X	
1-2-a.f		X	X	X		X	X	X	X	
1-2-c.f		X	X			X		X	X	
1-3-a.f			X					X		
1-3-c.f	X		X			X		X		
1-4-a.f				X				X		
1-4-c.f				X				X		
1-5-a.f	X	X		X				X		
1-5-c.f			X					X	X	
1-6-a.f							X	X	X	
1-6-c.f			X	X		X	X	X	X	
1-7-a.f				X				X		
1-7-c.f			X			X		X	X	
1-8-a.f			X					X		
1-8-c.f			X					X		
1-9-a.f								X	X	
1-9-c.f							X	X	X	

Table 41: *Keeping Track / Au fil du rail* — Elements indicative of explication on the part of the translator

Article	Elements Found						
	Error made in content	Trans. less specific	Trans. weaker	Emphasis deleted	Trans. wordy	Agent deleted	Trans. less clear
I-1-a.f		X	X			X	
I-1-c.f	X	X	X			X	X
I-2-a.f		X	X			X	
I-2-c.f		X				X	
I-3-a.f			X	X		X	
I-3-c.f	X						
I-4-a.f							
I-4-c.f							
I-5-a.f							
I-5-c.f							
I-6-a.f			X			X	
I-6-c.f						X	
I-7-a.f			X			X	
I-7-c.f			X			X	
I-8-a.f	X	X					
I-8-c.f							
I-9-a.f							
I-9-c.f							

Table 42 — Elements indicative of a lack of explication on the part of the translator

Eye on Safety / Prévenir

A total of 35 of the 52 elements (67.3%) coded were observed in *Eye on Safety / Prévenir*. Although some of the elements occurred on multiple occasions, as in the case of *Keeping Track / Au fil du rail*, others occurred relatively infrequently or even only once. Significantly there were no instances of grammar mistakes or awkward structure, the only two elements in the entire corpus which could be considered evidence of unidiomatic translation. A total of 524 text segments were coded.

a) Content

As in the case of *Keeping Track / Au fil du Rail*, the largest number of elements were observed in the content category with a total of 359 text segments coded in 13 of the 14 groups in this category (the one group of elements not observed was change in tone - more negative). This accounts for 68.6% of the total of 524 text segments coded. The three largest groups were omissions (97 text segments), additions (97 text segments), and mistranslations (94 text segments). Once again, I had expected to find omissions since the people working on this vehicle had also complained frequently in my presence that the French was always longer than the English and that it was occasionally difficult to fit the French text into the same layout as the English. In fact, a total of 97 omissions were observed in the seven articles studied. Yet, once again, I found no omissions of major portions of text (in terms of length). Furthermore, although the omissions observed also varied in terms of the significance of the omitted text, there were none which radically

altered the meaning. The changes were, in fact, rather subtle. The statistics are provided, followed by examples

Article	Frequency
II-1-b.f	7
II-1-c.f	4
II-2-b.f	15
II-2-c.f	18
II-3-c.f	18
II-4-b.f	14
II-4-c.f	21
Total	97

Table 43: *Eye on Safety / Prévenir*
— Omissions

Omissions — Example 1

II-4-b.e (Original): Thanks to the safety practices of CN workers, CN has reduced train accidents *per billion gross ton miles* by 62 per cent in the last ten years and remains one of the safest railways in North America.

II-4-b.f (Translation): Dans un autre ordre d'idées, grâce aux bonnes méthodes de travail du personnel, le nombre d'accidents de trains au CN a déchu de 62 pour cent au cours des dix dernières années ; ce qui en fait l'un des chemins de fer les plus sûrs en Amérique du Nord.

This omission does effectively shift the focus of the meaning somewhat.

Statistics on railway accidents are categorized in a variety of ways: in terms of the number of accidents on main lines and the number of accidents which occur on lines other than main lines, lost-time injury frequency ratios, lost-time and minor injuries, accidents which have to be reported to either the Federal Railroad Administration (a U.S. agency) or the Transportation Safety Board (Canada), to mention just a few. They can also be measured in terms of train-miles travelled or gross tonnage carried per mile. In

this particular accident, the 62 percent reduction refers to a specific measurement and it is misleading to imply that the number of all train accidents has decreased by the same amount.

Omissions — Example 2

II-3-c.e (Original): If inspection and aerial surveys point to any areas where beaver activity poses a threat, those sites will be inspected, and water would be *carefully* drained.

II-3-c.f (Translation): Si la photographie aérienne permet de découvrir de tels emplacements, ces derniers seront inspectés et le niveau d'eau sera abaissé.

This is another example of an omission which has shifted meaning. The article in question concerned a major derailment which occurred after a lake drained quickly following the rupture of a beaver dam. Two employees were killed and a third was seriously injured. The purpose of the article was to reassure employees that this type of accident could not recur since the beaver dam situation was now under control and bodies of water supporting railway tracks and fill would only be drained “carefully” in the future and not accidentally.

Omissions — Example 3

II-2-c.e (Original): *Commenting on the financial aspect of safety*, Mr. McBain said “Train accidents cut like a double-edged sword on our bottom line.”

II-2-c.f (Translation): «Par ailleurs, les accidents ferroviaires ont un double aspect sur les résultats financiers de l'entreprise», poursuit Jack McBain.

This final example is similar. In this case, the focus of the article was on the fact that in addition to or rather despite the cost employees pay for accidents in terms of deaths and injuries, the company too shoulders a heavy financial burden, with accidents

cutting into profits. Of course, it might appear a little crass to word it so directly, and the translator obviously downplayed this point of view with her omission. This is a clear example of the translator making a judgement as to the contents of what she translates.

Once again, I was surprised to note additions as well as omissions. In fact, there were the same number of additions and omissions in these translations, making it hard to conclude that the omissions were made solely for reasons of length and for no other motive on the part of the translator. As in the case of the omissions, the additions varied in significance. Some were made in an apparent effort to improve on the style, some shifted the meaning somewhat, and still others did effectively add information not contained in the original article. The statistics are provided first, followed by examples.

Article	Frequency
II-1-b.f	10
II-1-c.f	9
II-2-b.f	11
II-2-c.f	13
II-3-c.f	3
II-4-b.f	7
II-4-c.f	17
Total	70

Table 44: *Eye on Safety / Prévenir*
— Additions

Addition serving to improve style — Example 1

II-4-b.e (Original): Thanks to the safety practices of CN workers, CN has reduced train accidents per billion gross ton miles by 62 per cent in the last ten years and remains one of the safest railways in North America.

II-4-b.f (Translation): *Dans un autre ordre d'idées*, grâce aux bonnes méthodes de travail du personnel, le nombre d'accidents de trains au CN a décru de 62 pour cent au cours des dix dernières années ; ce qui en fait l'un des chemins de fer les plus sûrs en Amérique du Nord.

The example provided above reveals the translator's focus on improving on the original. She added material to make the transition between subjects and paragraphs more smooth. This is of particular interest to me personally since I wrote the article in question and have frequently been criticized for being too direct and abrupt in my writing.

Addition serving to increase accuracy — Example

II-1-b.e (Original): That is the hope of the producers: Operations Training, Engineering, and Safety and Loss Control.

II-1-b.f (Translation): C'est le pari de ce vidéo conçu par les fonctions Formation exploitation, Ingénierie (*réseau*), et Sécurité et contrôle des pertes.

Along with improving the writing style, the translator also added material which serves to increase the accuracy. In this specific case, the addition of “(réseau)” indicates that it is the Engineering department system-wide (meaning company wide) which produced the video and not some smaller sub-division which went by the same name.

Addition serving to shift meaning — Example

II-1-b.e (Original): The accidents are recreated in the video exactly and as dramatically as they occurred. Colleagues who witnessed the accidents also explain what happened, certifying the authenticity of the recreations.

II-1-b.f (Translation): La reconstitution des faits est efficace. La dramatique saisissante. D'autant plus que les témoignages vibrants de collègues de travail qui se trouvaient sur les lieux lors des accidents, valident *en quelque sorte* le récit.

And yet, some of this translator's additions did serve to shift the meaning somewhat. In the example provided above, her addition of "to a certain extent" ("en quelque sorte") qualifies the statement made in the original.

Finally, some additions do add new information not contained in the original, as illustrated in the example provided below, where the translator indicates how many of the employees killed on duty had been struck by trains.

Addition of new information — Example

II-1-b.e (Original): Funeral for a Friend is about five particular employees, but could have been about any of the 75 employees killed on the job at CN since 1980. The last name to be added to the list of tragedies is 46-year-old Steve Walker Whitehead, maintainer Signals and Communications, in Scarborough, Ontario, who was killed in an accident on January 15, 1993.

II-1-b.f (Translation): Funérailles d'un ami ou de celle des 75 personnes tuées dans l'exercice de leurs fonctions au CN depuis 1980. *Un tiers d'entre elles ont été frappées par un train.* Le dernier qui vient d'apparaître sur cette tragique liste : Steve Walker Whitehead, préposé à l'entretien Signalisation et communication à Scarborough (Ont.), est décédé accidentellement le 15 janvier 1993.

And finally, another addition in the translation of the same article serves to reinforce the tone of the article which focusses on death and funerals in an effort to raise employee awareness of the need for extreme safety precautions in certain situations. In this case the translator has chosen to further add to the already macabre tone of the article.

Interesting addition — Example

II-1-b.e (Original): Absorbed by their work, none of them saw or heard the train coming.

II-1-b.f (Translation): Concentrés sur les tâches à accomplir, ils n'ont jamais vu ou entendu le train venir... *ou du moins pas à temps.*

The third major group observed in the content category was mistranslations.

None of the mistranslations observed were major in the sense that they change the entire meaning of a text segment to mean something completely different. Rather, they represent a failure on the part of the translator to be quite as accurate or precise as the original. Statistics are provided, followed by an example.

Article	Frequency
II-1-b.f	8
II-1-c.f	5
II-2-b.f	6
II-2-c.f	18
II-3-c.f	23
II-4-b.f	8
II-4-c.f	26
Total	94

Table 45: *Eye on Safety / Prévenir*
— Mistranslations

Mistranslation — Example 1

II-4-c.e (Original): The Interfunctional safety and health committee in Melville, Sask., has given a *high priority* to level crossing safety, and its efforts are being recognized both within the railway and in the community at large.

II-4-c.f (Translation): Le comité de sécurité et de santé de Melville (Saskatchewan) s'est donné une *nouvelle priorité*: la sécurité aux passages à niveau. D'ailleurs, ses efforts lui ont déjà valu la reconnaissance du chemin de fer et celle de la collectivité en général.

In the example provided above, the meaning has shifted slightly. Specifically, there is a difference between a “high priority” and a new one.

Mistranslation — Example 2

II-2-c.e (Original): Training covers skills at different levels, from that required by an apprentice or a newly-hired employee, to the advanced knowledge required by supervisors and mature employees *seeking to qualify for more highly-skilled positions*.

II-2-c.f (Translation): La formation s'adresse à tous les niveaux des aptitudes de base que nécessitent les apprentis ou les personnes fraîchement embauchées, aux connaissances approfondies dont ont besoin les superviseurs et les personnes d'expérience *pour gravir les échelons dans la Compagnie*.

This second example is slightly more complex. In a highly industrialized firm such as CN, a great many positions require a high level of technical training without necessarily granting hierarchical status. Employees upgrading their skills in order to perform more complex work should not necessarily expect to move upwards through corporate hierarchy.

All in all, such changes might be considered relatively unimportant were it not for the number of times they occur (94 times in seven translations). Although the mistranslations in *Keeping Track / Au fil du rail* appeared more deliberate in nature, these would for the most part appear more indicative of a little carelessness or even lack of time on the part of the translator. The meaning is not necessarily changed so much as it is not precise. A major complaint of all translators is that they are not given enough time for their work and that they are brought into projects at the end rather than at the start. The translators surveyed confirmed this. The mistranslations observed in this set of translations would appear to indicate that there are problems with this.

The remaining 10 elements observed in the content category, all occurred much less frequently. The most important was the addition of clarifications. The translator

added clarifying material a total of 20 times in the seven translations. The statistics are provided first, followed by examples.

Article	Frequency
II-1-b.f	5
II-1-c.f	3
II-2-b.f	2
II-2-c.f	5
II-3-c.f	4
II-4-b.f	--
II-4-c.f	1
Total	20

Table 46: *Eye on Safety / Prévenir*
— Clarification added

Clarification added — Example

II-4-c.e (Original): All members have identified roles and responsibilities and their active participation ensures a safe work environment.

II-4-c.f (Translation): Tous les membres doivent s'acquitter de responsabilités précises et jouer un rôle actif dans *la création et le maintien* d'un lieu de travail sûr et sain.

In the above example, the translator has added material which she decided was needed to make the text understandable. As in the case of *Keeping Track / Au fil du rail*, the translator appears to feel that the quality of the original is not always what it should be and takes steps to improve on it. Yet, the clarifications she adds are not always necessary. In the following example, there was no need to insist on using “training videos” rather than just videos since the entire article is about videos being used for training. This clarification would appear superfluous.

Useless clarification added — Example

II-2-c.e (Original): Liberal use is made of drawings to illustrate written material, and videos have provided a useful new tool for showing employees the right and safest way to perform their tasks.

II-2-c.f (Translation): On se sert abondamment des graphiques afin d'illustrer les textes. De plus, les vidéos *de formation* constituent un outil fort utile pour montrer aux membres du personnel comment exécuter leurs tâches de façon adéquate et sûre.

There were also instances in which the translation was either more specific or less specific. As can be seen from the tables below, the translator tended to be more specific more often than less specific. As in the case of the added clarification, the increase in specificity is evidence of the translation's willingness to improve on text, while her decreased specificity reveals that she was not always successful. Examples follow the tables.

Article	Frequency
II-1-b.f	3
II-1-c.f	--
II-2-b.f	--
II-2-c.f	--
II-3-c.f	1
II-4-b.f	2
II-4-c.f	2
Total	8

Table 47: *Eye on Safety / Prévenir*
— Translation less specific

Article	Frequency
II-1-b.f	2
II-1-c.f	1
II-2-b.f	2
II-2-c.f	4
II-3-c.f	7
II-4-b.f	--
II-4-c.f	2
Total	18

Table 48: *Eye on Safety / Prévenir*
— Translation more specific

Translation less specific — Example

II-1-b.e (Original): Article Title: Emotional video shows how to stay alive on the job

II-1-b.f (Translation): Article Title: La communication par l'émotion

In this example, the translator has glossed over the reasons for the emotional communication, namely helping employees stay alive.

Translation more specific — Example

II-2-c.e (Original): A great deal of care goes into preparing course material that is both technically accurate and instructionally effective for those attending the courses. This *includes ensuring that the level of language used is that likely to be most familiar to the students.*

II-2-c.f (Translation): L'approche est rigoureuse : on veille à ce que le matériel soit exact sur le plan technique et efficace sur le plan de l'instruction. Dans *cette optique, on adopte un niveau de langue facile à comprendre pour les stagiaires.*

In this example, the translator appears to have translated the meaning and not the words, specifying that the language used in the training materials must be “easy to understand”, rather than the vague “most familiar to the students”, and clearly improving on the original text.

Article	Frequency
II-1-b.f	5
II-1-c.f	3
II-2-b.f	2
II-2-c.f	2
II-3-c.f	2
II-4-b.f	1
II-4-c.f	2
Total	17

Table 49: *Eye on Safety / Prévenir*
— Translation weaker

Article	Frequency
II-1-b.f	2
II-1-c.f	2
II-2-b.f	2
II-2-c.f	4
II-3-c.f	7
II-4-b.f	--
II-4-c.f	2
Total	19

Table 50: *Eye on Safety / Prévenir*
— Translation stronger

Translation weaker — Example

II-3-c.e (Original): Year after year, CN continues to be ranked as one of North America's safest railroads; safety has always been one of the company's *top* priorities. *Constant* vigilance, employee training, and equipment and track maintenance play a significant role in safety efforts throughout the CN system.

II-3-c.f (Translation): Année après année, le CN continue de se classer parmi les chemins de fer les plus sûrs d'Amérique du Nord : la sécurité a toujours figuré au nombre des priorités de la Compagnie. La vigilance, la formation du personnel et l'entretien de la voie et du matériel jouent un rôle important dans le cadre des activités de sécurité à l'échelle du réseau du CN.

In this example, the omission of two small adjectives serves to make the translation weaker than the original.

Translation stronger — Example

II-3-c.e (Original): In the event that such areas are found, CN does have an ongoing program to correct these conditions.

II-3-b.f (Translation): Si l'on découvre des lieux de cette nature, le CN mettra immédiatement en oeuvre son programme de redressement.

In this example, CN has a program in English but will implement it immediately in the French text.

As can be seen from both the statistics and the examples concerning translation more/less specific and translation weaker/stronger, this type of change did not occur with excessive frequency and did not have a major effect on the meaning of the text.

Finally, all of the remaining elements observed (corrections/errors, honorifics, change in tone) occurred with much less frequency. First, as in the case of the first translator studied, this translator also made a few corrections in content, while also making one error. In fact, she made four corrections in three articles: II-1-b.f (one), II-2-c.f (two) and II-3-c.f (one). The error occurred in article II-2-c.f. The corrections are in

keeping with the translators' stated strategy of correcting errors when they occur. Once again it is interesting to note that corrections made in a translation were not always made in the original.

In a similar manner, this translator also made some changes with respect to the use of honorifics. It should be noted, however, that the departmental rule against the use of honorifics for anyone other than CN's president and CEO was not applied rigidly with respect to the original version of this magazine. Specifically, honorifics were occasionally used. It is interesting to note that the translator did not always follow the usage of the original in this respect, deleting an honorific on one occasion (II-2-c.f) and adding honorifics on eight occasions, all in the same article (II-4-c.f).

Finally, this translator also made three minor changes in tone, making her translation more positive sounding than the original on three occasions, twice in II-2-c.f and once in II-3-c.f.

Change in tone (more positive) — Example 1

II-2-c.e (Original): Says Bill Sears, manager of the Gimli Centre: "Our mission is to ensure that locomotive engineers receive the best training they need to operate trains safely and efficiently. *It gets away from having to learn by the seat of your pants.*"

II-2-c.f (Translation): «Notre mission consiste à dispenser aux mécaniciens de locomotive la formation nécessaire à la conduite sûre et efficace des trains. *L'apprentissage est axé davantage sur la pratique*», dit Bill Sears, directeur du centre de Gimli.

This change in tone is an obvious example of the translator's willingness to improve on what she considers faults in the original text. Needless to say having

locomotive engineers learn to drive “by the seat of their pants” could be considered quite negative when you consider the size and power of the equipment they operate.

Change in tone (more positive) — Example 2

II-2-c.e (Original): All material is prepared in both official languages, and *this means careful checking* to ensure that technical terms are properly translated into English or French from original documents.

II-2-c.f (Translation): Tous les cours sont offerts dans les deux langues officielles, *on s'assure* que les termes techniques sont bien traduits en anglais et français, selon la langue dans laquelle le texte a été rédigé.

This particular example is of interest in that the translator has downplayed the amount of checking required. Apparently, she found the original text uncomplimentary to the company's translators.

b) Style

The second category of elements analyzed was style. This category was relatively minor, with only 48 text segments being coded in 11 of the 13 groups in this category. Thus, there was much less manipulation with respect to style in these translations than in the case of *Keeping Track / Au fil du rail*.

For example, there was little change in terms of emphasis. Specifically, the translator added emphasis in one text (II-1-c.f) and deleted it in one text (II-1-b.f). In both cases, the shift was so minor as to be insignificant in terms of the meaning.

Likewise, there was also little change with respect to the number of times the translator either added or deleted images. Specifically, she added images on three occasions (once in II-2-c.f and once in II-4-c.f) and she deleted images on three occasions

(once each in II-1-c.f, II-2-b.f and II-4-c.f). Specifically since this type of change occurred so infrequently and since images were both added and deleted with the same frequency, there was virtually no effect on the text.

Also, as in the case of *Keeping Track / Au fil du rail*, some efforts at nonsexist usage were also noted. Once again, this type of change occurred relatively infrequently — a total of three times (once in II-1-b.f and twice in II-2-c.f). Furthermore, none of the inconsistencies observed in the case of *Keeping Track / Au fil du rail* were noted with respect to these translations.

This translator also made some changes with respect to repetition found in the original, both adding her own repetition and deleting that found in the original. It is of interest, that she deleted repetition more frequently than adding it. The statistics are provided first, followed by examples.

Article	Frequency
II-1-b.f	1
II-1-c.f	2
II-2-b.f	--
II-2-c.f	--
II-3-c.f	--
II-4-b.f	--
II-4-c.f	--
Total	3

Table 51: *Eye on Safety / Prévenir*
— Repetition added

Article	Frequency
II-1-b.f	3
II-1-c.f	1
II-2-b.f	1
II-2-c.f	1
II-3-c.f	4
II-4-b.f	--
II-4-c.f	3
Total	13

Table 52: *Eye on Safety / Prévenir*
— Repetition deleted

Repetition added — Example

II-1-b.e (Original): The accidents are recreated in the video exactly and as dramatically as they occurred. Colleagues who witnessed the accidents also explain what happened, *certifying the authenticity* of the recreations. Their emotion is genuine; they witnessed what they hope never to see again.

II-1-b.f (Translation): La reconstitution des faits est efficace. La dramatique saisissante. D'autant plus que les témoignages vibrants de collègues de travail qui se trouvaient sur les lieux lors des accidents, *valident* en quelque sorte le récit. Empreints de sensibilité et d'émotion, ils marquent le vidéo *du sceau de la crédibilité*. Ils ont vu ce qu'ils ne veulent plus jamais revoir.

The translator did not add repetition on any significant scale, yet this example is of particular interest. This particular text segment has already been used as an example of an addition which has shifted meaning. By adding “en quelque sorte” to her sentence, the translator effectively qualified the concept of validating the film, yet when she further adds “sceau de la crédibilité”, she has repeated the concept of certifying the authenticity of the information contained in the video.

Repetition deleted — Example

II-4-c.e (Original): The new shop *has about twice the space* of the old one, so *there is more room* to work safely.

II-4-c.f (Translation): Le nouvel atelier *est environ deux fois plus grand* que l'ancien, ce qui rend le travail plus sûr.

In this particular example, the translator has deleted the needless repetition referring to the concept of space, effectively improving on the original.

The most significant elements in this category concerned the formality of the style. Specifically, although the translator only made the styles less formal on one occasion (in II-1-c.f), she did make it more formal on 16 occasions. The statistics are provided,

followed by one example of a text segment which was more formal. The changes of this type were relatively minor in nature.

Article	Frequency
II-1-b.f	--
II-1-c.f	1
II-2-b.f	--
II-2-c.f	--
II-3-c.f	--
II-4-b.f	--
II-4-c.f	--
Total	1

Table 53: *Eye on Safety / Prévenir*
— Style less formal

Article	Frequency
II-1-b.f	5
II-1-c.f	2
II-2-b.f	--
II-2-c.f	6
II-3-c.f	2
II-4-b.f	--
II-4-c.f	1
Total	16

Table 54: *Eye on Safety / Prévenir*
— Style more formal

Style more formal — Example

II-1-b.e (Original): “We’ve been extremely successful in the past few years in reducing employee disabling injuries — by 49 per cent between 1989 and 1992 — primarily because of direct *employee* involvement in developing and implementing their own safety programs.”

II-1-b.f (Original): «Nous avons réussi à réduire de 49% le nombre de blessure invalidantes parmi le personnel entre 1989 et 1992. Cette performance est due en grande partie à la participation directe des *membres du personnel* à l’élaboration et à la mise en oeuvre de leurs propres programmes de sécurité.»

On several instances, the translator used the slightly more formal “membres du personnel” rather than “employees” in her translation. This was not, however, judged to have had any significant effect on the overall translation.

Finally, this translator also made occasional changes in terms of either adding or deleting word play. Once again, this did not occur with any significant frequency and may, as a result, be indicative merely of the difficulty of translating plays on word (in the

sense that the translator added word play when she could in keeping with the spirit of the original, but omitted word play which did not translate well. The statistics are provided, followed by examples.

Article	Frequency
II-1-b.f	--
II-1-c.f	--
II-2-b.f	--
II-2-c.f	1
II-3-c.f	--
II-4-b.f	--
II-4-c.f	--
Total	1

Table 55: *Eye on Safety / Prévenir*
— Word play added

Article	Frequency
II-1-b.f	--
II-1-c.f	--
II-2-b.f	1
II-2-c.f	1
II-3-c.f	--
II-4-b.f	--
II-4-c.f	1
Total	3

Table 56: *Eye on Safety / Prévenir*
— Word play deleted

Word play added — Example

II-2-c.e (Original): Title: Locomotive engineers get real taste for safe operations

II-2-c.f (Translation): Title: Les mécaniciens de locomotive *sur... la voie de la sécurité* !

This is just the type of word play so favoured in the vehicles produced by CN's head office Public Affairs department

Word play deleted — Example

II-4-c.e (Original): Title: Halifax weathers all safety challenges

II-4-c.f (Translation): Title: Halifax : Il peut bien pleuvoir, grêler ou neiger...

In this case, the original contains another example of the type of word play favoured by the department producing this vehicle. This particular article concerned the safety problems inherent in difficult and constantly changing weather conditions. It contained many plays on words and images about the weather and some of them must have been quite impossible to translate.

c) Readability

The third category of elements observed affected the readability of the translations. Three of the four elements in this category were found in these translations — translation clearer, translation more concise, and translation wordy — with a total of 91 text segments coded in this category. By far, the largest number of elements (over 72%) were coded as translation clearer.

The statistics are provided first, followed by an example.

Article	Frequency
II-1-b.f	--
II-1-c.f	1
II-2-b.f	1
II-2-c.f	21
II-3-c.f	23
II-4-b.f	--
II-4-c.f	20
Total	66

Table 57: *Eye on Safety / Prévenir*
— Translation clearer

Translation clearer — Example

II-4-c.e (Original): You can't *take evasive action with a train* — only put on the brakes, blow the whistle and hope for the best.

II-4-c.f (Translation): C'est qu'il est *impossible de faire dévier un train de sa route* — on peut juste serrer les freins, faire retentir le sifflet de locomotive et croiser les doigts.

In this example, the how the translator has taken phrases which are virtually meaningless and interpreted them in light of the purpose of the article and the vehicle being translated, giving them meaning.

The second largest element noted in this category was translation more concise, with 24 text segments coded. In addition to making her translation clearer than the original on several occasions, this translator has also seen fit to edit the text when it appeared wordy to her. The statistics are provided first, followed by an example.

Article	Frequency
II-1-b.f	4
II-1-c.f	1
II-2-b.f	4
II-2-c.f	1
II-3-c.f	7
II-4-b.f	3
II-4-c.f	4
Total	24

Table 58: *Eye on Safety / Prévenir*
— Translation more concise

Translation more concise — Example

II-4-c.e (Original): *Tabled for discussion that morning were a number of issues:* cutting bushes, raising a low sport near a switch, repairing potholes, purchasing sun-screen dispensers, and raising awareness of the dangers of wearing white and brown during hunting season.

II-4-c.f (Translation): *A l'ordre du jour :* enlèvement des broussailles, élévation d'un point bas à proximité d'un aiguillage, réparation de nides-de-poule, achat d'un distributeur d'écran solaire, de même qu'un rappel sur le danger de porter de vêtements blancs et bruns en période de chasse.

This example provides another clear demonstration of just how the translator has manipulated the text, both to make it shorter (in keeping with the stated problems experienced as a result of text length) and to improve on it (cutting out unnecessary wordiness).

Finally, the third element in this category observed in this translation was translation wordy. This occurred on only one occasion (in II-c-f.) and cannot, as a result be considered significant — more likely a lapse on the part of the translator as a result of time constraints.

d) Structure

The fourth category of elements observed in this portion of the corpus were those affecting structure. Seven of the sixteen elements (43.8%) included in this category were observed in this vehicle, with a total of 22 text segments code. None of the seven elements were observed with any great frequency.

As in the case of *Keeping Track / Au fil du rail*, there were some changes with respect to the agents of certain actions, with the agent being added, removed or changed on occasion. The statistics are followed by examples.

Article	Frequency
II-1-b.f	--
II-1-c.f	1
II-2-b.f	--
II-2-c.f	--
II-3-c.f	1
II-4-b.f	--
II-4-c.f	1
Total	3

Table 59: *Eye on Safety / Prévenir* — Agent added

Article	Frequency
II-1-b.f	2
II-1-c.f	1
II-2-b.f	--
II-2-c.f	1
II-3-c.f	--
II-4-b.f	1
II-4-c.f	--
Total	5

Table 60: *Eye on Safety / Prévenir* — Agent changed

Article	Frequency
II-1-b.f	--
II-1-c.f	--
II-2-b.f	--
II-2-c.f	1
II-3-c.f	--
II-4-b.f	1
II-4-c.f	2
Total	4

Table 61: *Eye on Safety / Prévenir* — Agent removed

Agent added — Example

II-4-c.e (Original): As a result of a letter to the new tenant, *the dock was removed*.

II-4-c.f (Translation): Après avoir été informé de la situation par écrit, *le nouveau locataire a retiré le quai*.

Agent changed — Example

II-1-c.e (Original): CN and its employees pay a heavy price for accidents. *Employees are familiar* with the toll in fatalities and injuries, but less well known are the total dollar losses involved in accidents.

II-1-c.f (Translation): Un accident coûte très cher au CN et à son personnel. *On connaît bien* les statistiques sur les décès et les blessures, mais on ignore dans une large mesure l'impact financier d'un accident.

Agent removed — Example

II-2-c.e (Original): “CN managers from all levels, functions and locations are our direct customers,” says Sonia Serfaty, director - System Training, Human Resources. “*They’ve chosen safety* as an essential component of CN’s vision, values and strategy, and we reflect that priority in every one of the management training programs we offer.”

II-2-c.f (Translation): «Nous recrutons notre clientèle parmi les gestionnaires du CN à tous les échelons, et dans tous les unités administratives ou de travail, souligne Sonia Serfaty, directrice administrative Formation réseau. *Le sécurité est* un élément fondamental de la vision, des valeurs et de la stratégie du CN, et tous les programmes de formation que nous offrons tiennent compte de cette priorité.»

Although the translator made relatively few changes with respect to agent, those she made are of interest. As the first example shows, her addition of an agent on three occasions is clearly in keeping with her efforts at clarifying and improving on the original. By changing the agent in the example above, she indicates that the entire company, obviously including management, is as familiar with the high price of accidents as employees and by removing the agent in the third example, the translator has removed the focus on management choosing safety as a priority, making it a company priority. This is in keeping with the entire focus of the vehicle, as stated by the Assistant Vice-President of Safety, on CN’s blue-collar employees.

Also as in the case of the first set of translations analyzed, this translator also made a few changes with respect to paragraphs, combining paragraphs, breaking up paragraphs and, on one occasion, placing a paragraph elsewhere in the text. Once again, these changes were not at all frequent in nature, indicating both a solid respect for the formal structure of the original and a respect for the paragraph as a translation unit. The statistics are provided below, without examples.

Article	Frequency
II-1-b.f	2
II-1-c.f	--
II-2-b.f	1
II-2-c.f	--
II-3-c.f	--
II-4-b.f	1
II-4-c.f	1
Total	5

Table 62: *Eye on Safety / Prévenir* — Paragraph broken up

Article	Frequency
II-1-b.f	--
II-1-c.f	--
II-2-b.f	--
II-2-c.f	1
II-3-c.f	--
II-4-b.f	--
II-4-c.f	--
Total	1

Table 63: *Eye on Safety / Prévenir* — Paragraph moved

Article	Frequency
II-1-b.f	--
II-1-c.f	--
II-2-b.f	1
II-2-c.f	1
II-3-c.f	1
II-4-b.f	--
II-4-c.f	--
Total	3

Table 64: *Eye on Safety / Prévenir* — Paragraphs combined

The final structural element observed in this vehicle was quote used as a statement. This occurred on only one occasion, in II-2-c.f. This further indicates the translator's respect for the formal structure of the original.

e) Terminology

The final category studied concerned the terminology used in the translations. Only one of the five elements included in this category was observed in this set of translations: complicated terminology used. Furthermore, complicated terminology was used only on four occasions: in II-1-c.f (once), II-2-c.f (once) and II-4-c.f (twice). On all four occasions, Latin expressions (such as that used in the example provided), were used. This may be considered an unfortunate choice on the part of the translator who, as indicated in the translator survey, had much more education than the average blue-collar railway employee, particularly since reading ability has been considered a problem at CN.

Complicated terminology used — Example

II-4-c.e (Original): Says Mr. Canellos: “By going out on our walkabouts we learn at first hand of the safety issues that are concerning employees. We can see the problem ourselves, and listen to what the people who work with it have to say. Then we follow up in our afternoon meetings.”

II-4-c.f (Translation): «Lors de nos visites, nous prenons directement connaissance des préoccupations du personnel en matière de sécurité. Nous sommes en mesure de constater les problèmes *de visu* et d’entendre ce qu’ont à dire les principaux intéressés. Nous discutons ensuite des cas soulevés pendant nos réunions l’après-midi», dit M. Canellos.

Combinations of elements

The amount of data collected for this set of translations was much less voluminous than that for *Keeping Track / Au fil du rail*: seven articles, five categories, 35 elements and 359 text segments. As in the case of the first set of translations, the elements observed in this second set of translations were examined in terms of the various combinations noted. The same six hypotheses were considered and the same categories and combinations of elements were used.

a) Hypothesis 1 - Content

The following table summarizes the findings with respect to the content of the translations. The only element not observed with respect to this vehicle was change in tone - more positive. This table indicates that while a number of changes occurred with respect to content, they were far fewer in number than in *Keeping Track / Au fil du rail*. Significantly, six of the seven translations contained all four of the main elements observed in this category (additions, omissions, mistranslations and clarifications), while one translation (II-4-b.f) contained all but clarification added. It is also of interest that

over half of the text segments coded (359 of 524) fall into these four groups. These two factors combined would, once again, appear to eliminate the possibility that this type of text manipulation is either accidental, coincidental or haphazard and, rather, indicate a deliberate strategy on the part of the translator.

Article	Elements Found								
	Additions	Omissions	Mis-translations	Clarification added	Change in tone (more positive)	Trans. less/more specific	Trans. weaker or stronger	Error / Correction in content	Honorific added/ deleted
II-1-b.f	X	X	X	X		X	X	X	
II-1-c.f	X	X	X	X		X	X		
II-2-b.f	X	X	X	X		X	X	X	
II-2-c.f	X	X	X	X	X	X	X	X	X
II-3-c.f	X	X	X	X	X	X	X	X	
II-4-b.f	X	X	X			X	X		
I-4-c.f	X	X	X	X		X	X	X	X

Table 65: *Eye on Safety / Prévenir* — Elements indicative of changes to content

b) Hypothesis 2 - Style

Second, the combinations of elements coded were analyzed to determine if the translator chose to use a style which was either more or less neutral than that used in the original. The translations of *Eye on Safety / Prévenir* contained four of these eight elements which could be indicative of a more neutral style: emphasis deleted, repetition deleted, image deleted and word play deleted. Based on the statistics and examples provided with respect to these four elements and the table below, the translator would appear to have made some effort to use a more neutral style in her translations without, however, making any intense efforts in this respect.

Article	Elements Found			
	Emphasis deleted	Repetition deleted	Image deleted	Word play deleted
II-1-b.f	X	X		
II-1-c.f		X	X	
II-2-b.f		X	X	X
I-2-c.f		X		X
II-3-c.f		X		
II-4-b.f				
II-4-c.f		X	X	X

Table 66: *Eye on safety / Prévenir* — Elements indicative of a more neutral style

Likewise, the translations in question contained five of the six elements which could be indicative of a less neutral style: emphasis added, repetition added, style more formal, image added and word play added. Once again, as indicated both by the

examples and statistics provided with respect to the elements observed, the translator would appear to have made some effort at using a less neutral style.

Article	Elements Found				
	Emphasis added	Repetition added	Style more formal	Image added	Word play added
II-1-b.f		X	X		
II-1-c.f	X	X	X		
II-2-b.f					
II-2-c.f			X	X	X
II-3-c.f			X		
II-4-b.f					
II-4-c.f			X	X	

Table 67: *Eye on safety / Prévenir* — Elements indicating a less neutral style

Tables 66 and 67 clearly indicate that the stylistic inconsistencies observed with respect to *Keeping Track / Au fil du rail* also exist in this second set of translations and that, once again, no valid conclusion can be drawn as to whether the style chosen by the translator is more or less neutral than that of the original.

c) Hypothesis 3 - Readability

The third hypothesis examined concerned the readability of the translations. In the first portion of the corpus analysis, the readability indices indicated some effort on the part of the translator to make her translations more readable (or easier to read) than the originals. The combinations of elements were then studied to see if they supported this

data. Of the three elements which would reduce readability, only one (complicated terminology) was observed in the *Eye on Safety / Prévenir* translations and this on only four occasions in three articles (II-1-c.f, II-2-c.f, and II-4-b.f). There would, as a result, appear to be no evidence on an effort on the part of the translator to reduce readability.

The *Eye on Safety / Prévenir* translations contained only two of these elements which would increase readability: translation clearer and clarification added.

Article	Elements found	
	Translation clearer	Clarification added
II-1-b.f		X
II-1-c.f	X	X
II-2-b.f	X	X
II-2-c.f	X	X
II-3-c.f	X	X
II-4-b.f		
II-4-c.f	X	X

Table 68: *Eye on Safety / Prévenir* — Elements which increase readability

As indicated in the statistics provided earlier, the translator added clarification a total of 20 times and her translation was clearer than the original a total of 66 times.

While these two elements were not observed in all seven of the translations, there would nevertheless appear to be a clear indication of an effort on the part of the translator to make her translations more readable than the originals.

d) Hypothesis 4 - Terminology

Only one of the elements affecting terminology, complicated terminology, was observed in this set of translations, on four occasions in three texts (II-1-c.f, II-2-c.f and II-4-c.f). Therefore, there is no evidence of significant changes made with respect to terminology.

e) Hypothesis 5 - Structure

The statistical analysis of these translations revealed little structural change in that the number of paragraphs and sentences in the translations were generally quite similar to the numbers in the original. Also, the comparison of the translations to the originals revealed little change in this respect, with the translator occasionally adding, changing and removing the agents of activities, breaking some paragraphs up, combining others, and moving one, and using a quote as a statement on one occasion. None of the elements was observed in any significant quantity and none of the translations ever contained more than three of these elements.

Article	Elements Found						
	Agent added	Agent changed	Agent removed	Paragraph broken up	Paragraphs combined	Paragraph moved	Quote used as statement
II-1-b.f		X		X			
II-1-c.f	X	X					
II-2-b.f				X	X		
II-2-c.f		X	X		X	X	X
II-3-c.f	X				X		
II-4-b.f		X	X	X			
II-4-c.f	X		X	X			

Table 69: *Eye on Safety / Prévenir* — Elements affecting structure

f) - Hypothesis 6 - Explication

Finally, the combinations of elements were examined in order to determine whether there was an effort on the part of the translator to explicate. All of the elements which would lead to a conclusion that the translator does explicate were observed in the *Eye on Safety / Prévenir* translations, but not in each of the translations. Yet, the translations in question also contained six of the seven elements which would mitigate against any such conclusion. Once again, as can be seen from Tables 71 and 72 on the following pages, the data does not point strongly in either direction.

Article	Elements Found								
	Correction made in content	Trans. more specific	Trans. stronger	Repetition added	Emphasis added	Trans. more concise	Agent added	Clarifi. added	Trans. clearer
II-1-b.f	X	X	X	X		X		X	
II-1-c.f		X	X	X	X	X	X	X	X
II-2-b.f		X	X			X		X	X
II-2-c.f	X	X	X			X		X	X
I-3-c.f	X	X	X			X	X	X	X
II-4-b.f						X			
II-4-c.f		X	X			X	X	X	X

Table 70: *Eye on Safety / Prévenir* — Elements indicative of explication on the part of the translator

Article	Elements Found					
	Error made in content	Trans. less specific	Trans. weaker	Emphasis deleted	Trans. wordy	Agent removed
II-1-b.f		X	X	X		
II-1-c.f			X		X	
II-2-b.f			X			
II-2-c.f	X		X			X
II-3-c.f		X	X			
II-4-b.f		X	X			X
II-4-c.f		X	X			X

Table 71: *Eye on Safety / Prévenir* — Elements indicative of a lack of explication on the part of the translator

Rail Lines / Écho Rail

A total of 28 of the 52 elements (53.8%) coded were observed in *Rail Lines / Écho Rail*. This is fewer than the 46 elements observed in the *Keeping Track / Au fil du Rail* translations and the 35 elements noted in the *Eye on Safety / Prévenir* translations. Although some of the elements occurred on multiple occasions, as in the case of both the first two vehicles studied, many occurred relatively infrequently or even only once. A total of 347 text segments were coded in the 10 translations studied, much fewer than the 1,099 coded for the 18 *Keeping Track / Au fil du rail* translations and the 524 coded for the seven *Eye on Safety / Prévenir* translations.

Of the two elements which could be indicative of an unidiomatic translation (awkward structure and grammar mistake) only one, grammar mistake was found in this

portion of the corpus. In fact, three grammar mistakes were noted in this set of translations: one in III-3-c.f and two in III-5-c.f. It should be noted that all three mistakes involved the use of “*efficience*” in French to translate “efficiency”, an obvious anglicism.

Grammar mistake — Example

III-3-c.e (Original): Higgerty says the construction of the new terminal will complement CN’s cost efficiency in other areas, such as fuel-efficient locomotives, cabooseless trains and two-man crews.

III-3-c.f (Translation): Higgerty dit que la construction du nouveau terminal complétera *l’efficience* du CN dans d’autres secteurs : locomotives à faible consommation de carburant, trains sans fourgon de queue et équipes de deux personnes.

a) Content

Once again, the largest number of elements were observed in the content category, with a total of 232 text segments coded in 10 of the 14 groups in this category (the four elements not observed were error made in content, honorific deleted, translation less specific and translation more specific). This accounts for 66.8% of the total number of text segments coded, which is very close to the percentages found for both *Keeping Track / Au fil du rail* (63.6%) and *Eye on Safety / Prévenir* (68.6%).

The four largest groups were omissions (42 text segments), additions (46 text segments), clarification added (49 text segments), and mistranslations (61 text segments). As in the case of the first two vehicles studied, I had expected to find omissions. Yet, once again, I found no omissions of large portions of text. On one occasion, in III-8-c.f, a subtitle was deleted. Although most of these omission were minor in nature, involving a few words, a few details, or the occasional job title as well as the omission of useless or

inaccurate material, this translator did occasionally omit entire sentences. The statistics are provided first, followed by examples.

Article	Frequency
III-1-c.f	4
III-2-c.f	8
III-3-c.f	3
III-4-c.f	5
III-5-c.f	5
III-6-c.f	5
III-7-c.f	2
III-8-c.f	2
III-9-a.f	8
III-9-c.f	--
Total	42

Table 72: *Rail Lines / Écho Rail*
— Omissions

Omission — Example 1

III-1-c.e (Original): Vandals frequently break switch locks or put foreign material on the track, while trespassers wreak havoc with all terrain vehicles and trucks cause damage by crossing the tracks where there is no *proper* level crossing.

III-1-c.f (Translation): Il arrive souvent que des vandales brisent les cadenas des appareils de manoeuvre d'aiguillage ou placent des objets sur la voie en la traversant à des endroits où il n'y a pas de passage à niveau.

This example demonstrates how the translator has omitted useless words from the original, in an obvious attempt to improve on the original. Any crossing which is a

“level” crossing is by definition a “proper” crossing in that it has to have been built with the approval of the railway. Implying that there could be an “improper” type of level crossing is inaccurate. Most of the omissions made by this translator were of this type.

Omission — Example 2

III-6-c.e (Original): “This year we had the third lowest injury index and we look forward to improving that substantially next time around. ***Our goal is to be the safest railroad in North America.***”

III-6-c.f (Translation): «L’an prochain, nous comptons bien faire mieux qu’une troisième place pour ce qui est de l’indice d’accidents avec blessures», nous confie Hanson.

Here, too, with the omission of the sentence indicated in bold and italics, the translator is improving. CN’s goal was to become the safest railroad in North America and the sentence indicated above occurred frequently, with little variation, in quotes from many CN executives used in the various vehicles. Yet, the person quoted here had regional, not company-wide, responsibilities and the article in question concerned a regional safety award, not an industry-wide one. The translator would appear to be improving on the text, based on her view of the importance of the comment made.

Omission — Example 3

III-5-c.e (Original): We are all looking at ways ***in which we can change*** — to serve our customers better and improve the efficiency of our operations.

III-5-c.f (Translation): Nous cherchons des façons de mieux servir la clientèle et d’améliorer l’efficience de l’exploitation.

Finally, in Example 3, the translator does actually omit information contained in the original. In Example 3, the omission is important since the focus is on looking at how

CN and its employees *can change* in order to better serve its/their customers. This type of omission was relatively infrequent.

As in the case of the first two sets of translations, this translator also made roughly the same number of additions as omissions. The statistics follow.

Article	Frequency
III-1-c.f	2
III-2-c.f	13
III-3-c.f	3
III-4-c.f	7
III-5-c.f	4
III-6-c.f	3
III-7-c.f	4
III-8-c.f	6
III-9-a.f	3
III-9-c.f	1
Total	46

Table 73: *Rail Lines / Écho Rail*
— Additions

Addition — Example 1

III-9-c.e (Original): The new facility is the latest in a number of strategically located hubs across the country, each linked by CN's Laser train service.

III-9-c.f (Translation): Le terminal de Halifax, dont l'ouverture officielle a eu lieu le 2 décembre dernier, est le dernier-né d'une série de terminaux centraux stratégiquement situés dans l'ensemble du pays, reliés entre eux par le service *fiable et rapide* du train Laser du CN.

Most of the additions made by this translator were quite minor in nature, similar in nature to the example provided. Yet, as can be seen from Example 2 below, this translator did occasionally add completely new material, based on what she considered to be in keeping with the message being communicated to the readers. Although this is in keeping with the translator's stated strategy of correcting the original, it is interesting to note that the original was not edited accordingly.

Addition — Example 2

III-9-a.e (Original): And when the regional profitability data is developed at year end, the Atlantic Region should have continued to have achieved good improvements over the previous year.

III-9-a.f (Translation): En matière de rentabilité, la région de l'Atlantique s'est beaucoup améliorée comparativement à l'année précédente. *Nous pourrions ainsi être fiers de nos réalisations.*

Addition — Example 3

III-6-c.e (Original): Tellier chatted with employees following his presentation and encouraged them to keep up the good work.

III-6-c.f (Translation): *M. Tellier ne doute aucunement des capacités de la région de l'Atlantique. Il a indiqué qu'il espérait bien revenir l'an prochain présenter un autre Prix de sécurité.* Il a d'ailleurs encouragé le personnel à poursuivre son bon travail.

Example 3 provides additional evidence of the translator's willingness to modify the original text, for the purpose of improving on it. This example is all the more interesting since P.M. Tellier, President and CEO of CN, generally insisted on approving any material written about him in both official languages. Therefore, while this addition was most likely approved at the highest level, here too the original text was not changed accordingly.

The third significant element in the content category noted in this set of translations, clarification added, was observed with roughly the same frequency as both additions and omissions. The statistics follow.

Article	Frequency
III-1-c.f	7
III-2-c.f	8
III-3-c.f	6
III-4-c.f	10
III-5-c.f	6
III-6-c.f	2
III-7-c.f	2
III-8-c.f	1
III-9-a.f	7
III-9-c.f	--
Total	49

Table 74: *Rail Lines / Écho Rail*
— Clarification added

For the most part, as demonstrated by the example provided below, the material added served to provided additional precision in an effort to ensure no misunderstanding on the part of the reader. This ties in perfectly with other attempts observed on the part of this translator and the two others so far to improve on the original.

The fourth significant element in the content category, mistranslations, occurred with greater frequency than the other three. The statistics follow.

Article	Frequency
III-1-c.f	6
III-2-c.f	13
III-3-c.f	7
III-4-c.f	6
III-5-c.f	4
III-6-c.f	--
III-7-c.f	2
III-8-c.f	4
III-9-a.f	12
III-9-c.f	7
Total	61

Table 75: *Rail Lines / Écho Rail*
— Mistranslations

Furthermore, in the case of this set of translations as compared to the other two, the mistranslations observed were all slight shifts in meaning and not changes which could be considered deliberate changes on the part of the translator. They would appear, instead, to be the result of translator error and not translator strategy. This is surprising, considering the efforts made by this particular translator to add clarification to her translations and ensure understanding. Specifically, on the one hand, we have evidence of a translator who takes great pains with her work, while on the other we have evidence of a certain lack of attention. One example is provided.

Mistranslation — Example

III-9-a.e (Original): More than ever before we are placing our emphasis on front-line personnel. Most of you have had the opportunity *to attend one of the more than 125 information sessions* held regarding our new service reliability strategy and how we are spending \$100 million to reconfigure all our computer systems.

III-9-a.f (Translation): Plus que jamais, nous mettons l'accent sur le personnel en contact direct avec le client. Beaucoup ont eu l'occasion *d'assister aux plus de 125 séances d'information* données sur notre nouvelle stratégie fiabilité de service et, sous ce rapport, nous dépensons 100 millions de dollars pour la reconfiguration de notre réseau informatique.

The remaining elements in the content category were observed with much less frequency. The most significant (in terms of number) were honorific added and translation stronger. With respect to use of honorifics, honorifics were added on a total of 14 occasions. Yet when honorifics were used in the original, they were also always used in the translation. The table showing the frequency of such additions is provided below.

Article	Frequency
III-1-c.f	--
III-2-c.f	4
III-3-c.f	--
III-4-c.f	--
III-5-c.f	2
III-6-c.f	3
III-7-c.f	--
III-8-c.f	5
III-9-a.f	--
III-9-c.f	--
Total	14

Table 76: *Rail Lines / Écho Rail*
— Honorific added

In a similar manner, the translator made her translation stronger than the original on 13 occasions and weaker on only one occasion. The statistics are provided below.

Article	Frequency
III-1-c.f	--
III-2-c.f	2
III-3-c.f	3
III-4-c.f	--
III-5-c.f	1
III-6-c.f	--
III-7-c.f	4
III-8-c.f	--
III-9-a.f	3
III-9-c.f	--
Total	13

Table 77: *Rail Lines / Écho Rail*
— Translation stronger

Article	Frequency
III-1-c.f	1
III-2-c.f	--
III-3-c.f	--
III-4-c.f	--
III-5-c.f	--
III-6-c.f	--
III-7-c.f	--
III-8-c.f	--
III-9-a.f	--
III-9-c.f	--
Total	1

Table 78: *Rail Lines / Écho Rail* — Translation weaker

Examples of these elements are provided below. On the occasions on which the translator made her translation stronger than the original, she would also appear to have been more honest and direct, preferring to refer specifically to track abandonment and job cuts. The one instance when her translation is weaker is similar to the mistranslations she also made. She is close to the meaning of the original, but her translation is not perfectly accurate.

Translation stronger — Example

III-2-c.e (Original): The remaining 1,000 positions to be abolished in 1994-1995 have not yet been specifically identified. However, it is anticipated that aggressive actions to be taken by the Company to improve productivity and *reshape the railway network*, as well as rationalize facilities in Atlantic Canada, will be key ingredients in determining where *further adjustments* can take place.

III-2-c.f (Translation): Les quelques 1 000 emplois à abolir au cours des années 1994 et 1995 dans la région de l'Atlantique du CN n'ont pas encore été déterminés. Toutefois, la Compagnie a l'intention de prendre des mesures plutôt dynamiques en vue d'augmenter la productivité, de *réduire la taille du réseau* et de rationaliser les installations du CN au Canada Atlantique. La Compagnie sera alors mieux en mesure de déterminer les secteurs où il y a lieu de faire des *réductions*.

Translation weaker — Example

III-1-c.e (Original): Public Affairs is responsible for releasing the information to the public through the media, while the Transportation Department coordinates all activities with respect to the disruption, which includes the responsibility for rerouting and handling traffic, the rerailment process and the emergency response. The Engineering Department is mainly responsible for helping clear and rebuild the track, while the Equipment Department *is instrumental* in the rerailing of cars and determines whether they should be repaired or replaced.

III-1-c.f (Translation): Les Affaires publiques sont chargées des communications avec les médias en vue de mettre le public au courant, tandis que le Transport coordonne les opérations à effectuer en cas d'interruption de service, lesquelles comprennent le réacheminement et le contrôle du trafic, le processus de remise sur rails et les interventions d'urgence. L'Ingénierie a comme principal rôle de dégager la voie et de la remettre en état, tandis que le Matériel roulant *participe* à la remise sur rails des wagons et détermine si ceux-ci doivent être réparés ou remplacés.

The final remaining elements in the content category were observed infrequently. For instance, a change in tone (more positive) was noted on only two occasions, in III-4-c.f and in III-7-c.f. Similarly, corrections in content were observed on three occasions, in III-3-c.f, III-4-c.f and III-6-c.f. These corrections are of interest in the sense that the author of these texts was a freelance writer, and not a CN employee, and the translator, a CN employee, revealed her greater knowledge of the firm and its workings. Unfortunately, her corrections were not incorporated in the original English texts.

b) Style

As for the second category, style, very few changes were noted. In fact, a total of nine elements were coded in three groups: nonsexist usage added, repetition added and repetition deleted. These nine elements occurred as follows: on two occasions, both in III-1-c.f, the translator added nonsexist usage; on three occasions (once in III-1-c.f and twice in III-2-c.f), the translator added repetition; and on four occasions (once in III-6-c.f, once III-7-c.f, and twice in III-8-c.f), the translator deleted repetition. No examples are provided. The very sparseness of changes observed in the style category indicate that the translator's strategy was a close rendering of the original in terms of style.

c) Readability

More changes were noted in the third category, readability. A total of 82 text segments were coded in two of the four groups in this category: translation clearer and translation less wordy. A majority of the text segments code, over 74%, were observed in the translation clearer group. The statistics are provided, followed by an example.

Article	Frequency
III-1-c.f	14
III-2-c.f	2
III-3-c.f	4
III-4-c.f	9
III-5-c.f	--
III-6-c.f	4
III-7-c.f	18
III-8-c.f	5
III-9-a.f	5
III-9-c.f	--
Total	61

Table 79 : *Rail Lines / Écho Rail*
— Translation clearer

Translation clearer — Example

III-2-c.e (Original): However, it is anticipated that aggressive actions to be taken by the Company to improve productivity and *reshape the railway network*, as well as rationalize facilities in Atlantic Canada, will be key ingredients in determining where *further adjustments* can take place.

III-2-c.f (Translation): Toutefois, la Compagnie a l'intention de prendre des mesures plutôt dynamiques en vue d'augmenter la productivité, *de réduire la taille du réseau* et de rationaliser les installations du CN au Canada Atlantique. La Compagnie sera alors mieux en mesure de déterminer les secteurs où il y a lieu *de faire des réductions*.

This type of change is a clear indication of efforts on the part of the translator to improve on the original and is particularly interesting in that the translation appears to be somewhat more direct or even honest than the original, referring to reducing the rail network instead of reshaping it and to making job cuts rather than adjustments.

In a similar manner, the translator improved on the original by eliminating wordiness where she found it. The statistics are provided, followed by an example.

Article	Frequency
III-1-c.f	2
III-2-c.f	2
III-3-c.f	1
III-4-c.f	4
III-5-c.f	1
III-6-c.f	1
III-7-c.f	3
III-8-c.f	3
III-9-a.f	4
III-9-c.f	—
Total	21

Table 80: *Rail Lines / Écho Rail*
— Translation more concise

Translation more concise — Example

III-1-c.e (Original): The Environment Department overseas clean-up of material that presents a hazard to the environment and advises various regulatory bodies *as dictated by the incident*.

III-1-c.f (Translation): Le service de l'Environnement supervise les opérations de nettoyage du matériel qui présente un danger pour l'environnement et notifie les organismes réglementaires *appropriés*.

d) Structure

A slightly smaller number of text segments were coded in the fourth category, structure. Furthermore, since these 47 text segments were distributed over a larger number of groups (11 of the 16 groups observed), with no more than 4 text segments being coded in any given group, the initial impression created by this data is of very little change.

One item in this category, change in order, was observed for the first time in the corpus in the *Rail Lines / Écho Rail* translations. This was a rather trivial change and there appears to be no apparent reasons for it. The text segment in question is provided below.

Change in order — Example

III-5-c.e (Original): On May 3, *CN North America and Maritime Ontario Freight Lines Limited* announced a long-term partnership agreement to haul traffic between Central Canada and the Maritimes.

III-5-c.f (Translation): *Maritime-Ontario Freight Lines Limited et CN Amérique du Nord* ont annoncé, le 3 mai, la conclusion d'une alliance à long terme concernant le transport des marchandises entre le centre du pays et les Maritimes.

As in the case of the previous two vehicles analyzed, certain changes were made in this group of translations with respect to the addition or change of agents performing various actions. Yet such changes occurred on only four occasions: an agent was added on three occasions (twice in III-4-c.f and once in III-9-c.f) and an agent was changed on only one occasion (in III-3-c.f). An example of each type of change is provided. The second example is the more significant since the agent was changed from a department to the company as a whole, giving more weight to the statement.

Agent added — Example

III-4-c.e (Original): "There are a lot of things we take for granted in our safety programmes. *The audit* was very specific in assigning responsibility. *It was felt* that we should be assigning safety responsibilities in job descriptions," says Steeves.

III-4-c.f (Translation): «Nous tenons beaucoup de choses pour acquis au chapitre des programmes de sécurité. *Les vérificateurs* ont été très précis dans la répartition de la responsabilité ; *ils estiment* que les descriptions de poste devraient délimiter la responsabilité de chacun», affirme Steeves.

Agent changed — Example

III-3-c.e (Original): The new terminal in Halifax, combined with Laser into the port city, represents the latest step in *Intermodal's* strategic plan for the Region.

III-3-c.f (Translation): La construction du nouveau terminal de Halifax et l'extension du service de trains Laser jusqu'à la ville portuaire représentent le plus récent développement dans le plan d'action stratégique du *CN* pour la Région.

Changes made with respect to the number of paragraphs were also very minimal. Specifically, paragraphs were broken up on a total of four occasions (once in III-4-c.f, twice in III-5-c.f. And once in III-9-a.f) and paragraphs were combined on one occasions (III-1-c.f). No examples are provided.

Likewise, very few changes were observed with respect to quotes. Specifically, one direct quote was made indirect (III-6-c.f), one indirect quote was made direct (III-4-c.f), and one quote was used as a statement and not attributed to the person quoted in the original (III-2-c.f).

Also along the same lines, only four changes were observed in the case of the person used. Namely, the person was changed from the 1st to the third on three occasions (all in III-2-c.f) and the person was changed from the 2nd to the 3rd on one occasion (also in III-2-c.f). An example of each is provided. All four changes were relatively insignificant.

e) Terminology

Finally, this group of translations also contained very little evidence on change with respect to the fifth category: terminology. In fact, only one text segment was coded: one instance of complicated terminology used was observed in III-8-c.f.

Combinations of elements

The amount of data collected for this set of translations was much less voluminous than that for either *Keeping Track / Au fil du rail* or *Eye on Safety / Prévenir*: 10 articles, five categories, 27 elements and 344 text segments. As in the case of the first two sets of translations studied, the various elements observed in this second set of translations were examined in terms of the various combinations noted. The same six hypotheses were considered and the same categories and combinations of pairs of elements were used.

a) Hypothesis 1 - Content

The table provided on the following page summarizes the findings with respect to the content of the translations. Ten of the 14 items in this category were observed with respect to this vehicle. This table indicates that a number of changes did occur with respect to content and that some of them were observed rather uniformly throughout this portion of the corpus. Specifically, eight of the 10 translations contained all four of the main elements observed in this category (additions, omissions, mistranslations and clarifications), while one translation (III-6-c.f) contained all but mistranslations and one

contained only additions and mistranslations. It is also of interest that over 60% of the text segments coded (232 of 524) fall into these four groups. These two factors combined would, once again, appear to eliminate the possibility that this type of text manipulation is either accidental, coincidental or haphazard and, rather, indicate a deliberate strategy on the part of the translator.

Article	Elements Found									
	Additions	Omissions	Mis-translations	Clarification added	Change in tone (more positive or more negative)	Trans. less/more specific	Trans. weaker or stronger	Trans. more neutral	Error / Correction in content	Honorific added/ deleted
III-1-c.f	X	X	X	X			X			
III-2-c.f	X	X	X	X			X	X		X
III-3-c.f	X	X	X	X			X		X	
III-4-c.f	X	X	X	X	X				X	
III-5-c.f	X	X	X	X			X	X		X
III-6-c.f	X	X		X					X	
III-7-c.f	X	X	X	X	X		X			
III-8-c.f	X	X	X	X						X
III-9-a.f	X	X	X	X			X			
III-9-c.f	X		X							

Table 81: *Rail Lines / Écho Rail* — Elements indicative of a change in content

b) Hypothesis 2 - Style

Second, the combinations of elements coded were analyzed to determine if the translator chose to use a style which was either more or less neutral than that used in the original. The translations of *Rail Lines / Écho Rail* contained only one of the eight elements which could be indicative of a more neutral style: four instances of repetition deleted in three articles. Therefore, there is no indication that the translator made any conscious effort to use a more neutral style in her work. Likewise, the translations in question contained only one of the six elements which could be indicative of a less neutral style: repetition added, on three occasions in two articles. Therefore, there is also no evidence that the translator made any attempts to use a less neutral style.

c) Hypothesis 3 - Readability

The third hypothesis examined concerned the readability of the translations. In the first portion of the corpus analysis, the readability indices indicated a possible effort on the part of the translator to make her translations more readable (or easier to read) than the originals, with a need for corroboration from another source. As a result, the combinations of elements were studied to see if they provided that corroboration. Of the three elements which could reduce readability, only one (complicated terminology) was observed in the *Rail Lines / Écho Rail* translations and this on only one occasion. There would, as a result, appear to be no evidence on an effort on the part of the translator to reduce readability. Furthermore, the *Rail Lines / Écho Rail* translations contained only two of the elements which would increase readability: translation clearer and clarification

added. As indicated in the statistics provided earlier, the translator added clarification a total of 49 times and her translation was clearer than the original a total of 61 times. Moreover, both elements were observed in eight of the ten translations, with only one (III-5-c.f) containing only clarification added and only one (III-9-c.f) containing neither. This would appear to be a clear indication of an effort on the part of the translator to make her translations more readable than the originals.

d) Hypothesis 4 - Terminology

The fourth hypothesis concerned changes in terms of terminology. Only one of the elements effecting terminology, complicated terminology, was observed in this set of translations, and on only one occasion (in III-8-c.f). Therefore, there is no evidence of significant changes made with respect to terminology.

e) Hypothesis 5 - Structure

The statistical analysis of these translations revealed little structural change in that the number of paragraphs and sentences in the translations were generally quite similar to the numbers in the original. Also, the comparison of the translations to the originals revealed only little change in this respect, with the translator only occasionally adding or changing the agents of activities, breaking some paragraphs up and combining others, and making changes with respect to quotes or the person used. None of the elements was observed in any significant quantity and none of the translations ever contained more than three of these elements at a time.

f) Hypothesis 6 - Explicitation

Finally, the combinations of elements were examined in order to determine whether there was an effort on the part of the translator to explicate. Three of the elements which would lead to a conclusion that the translator does explicate (translation more concise, clarification added, and translation clearer) were noticed in all but one of the translations. The only translation which contained none of them was III-9-c.f. The remaining elements were noticed only sporadically. At the same time, only two of the elements which would mitigate against any such conclusion (translation weaker and repetition deleted) were observed at all and only infrequently. This data would appear to indicate some efforts on the part of the translator to explicate.

Article	Elements Found							
	Correction made in content	Trans. more specific	Repetition added	Emphasis added	Trans. more concise	Agent added	Clarifi. added	Trans. clearer
III-1-c.f			X		X		X	X
III-2-c.f			X		X		X	X
III-3-c.f	X				X		X	X
III-4-c.f	X				X	X	X	X
III-5-c.f					X		X	
III-6-c.f	X				X		X	X
III-7-c.f					X	X	X	X
III-8-c.f					X		X	X
III-9-a.f					X		X	X
III-9-c.f								

Table 82: *Rail Lines / Écho Rail* — Elements indicative of explication on the part of the translator

Le Laurentien / The Laurentian

This is the first of the two vehicles in the corpus which was translated from French to English and the translations were produced by a pair of translators working in CN's Linguistic Services department. There was no way of identifying which of the translators worked on which texts. A total of 21 of the 52 elements (40.4%) coded were observed in *Le Laurentien / The Laurentian*. This is fewer than the 47 elements observed in the *Keeping Track / Au fil du Rail* translations, the 35 elements noted in the *Eye on Safety / Prévenir* translations, and the 28 elements found in *Rail Lines / Écho Rail*. Once again, although some of the elements occurred on multiple occasions, as in the case of the first three vehicles studied, many occurred relatively infrequently or even only once. A total of 306 text segments were coded in the 10 translations studied. This, too, is much fewer than the 1,099 coded for the 18 *Keeping Track / Au fil du rail* translations and the 524 coded for the seven *Eye on Safety / Prévenir* translations, and slightly less than the 347 text segments coded for *Rail Lines / Écho Rail*. Neither of the two elements which could be indicative of a unidiomatic structure or grammar mistake, were found in this portion of the corpus.

a) Content

Once again, the largest number of elements were observed in the content category, with a total of 190 text segments coded in 9 of the 14 groups in this category (the five elements not observed were change in tone - more negative, error made in content, honorific added, translation less specific and translation more specific). This accounts for

62.3% of the total number of text segments coded, which is very close to the percentages found for *Keeping Track / Au fil du rail* (63.6%), *Eye on Safety / Prévenir* (68.6%), and *Rail Lines / Écho Rail* (67.4%).

The four largest groups were omissions (39 text segments), additions (28 text segments), clarification added (59 text segments), and mistranslations (52 text segments). As in the case of the first three vehicles studied, I had expected to find omissions. Yet, once again, I found no omissions of large portions of text. It is interesting to note that on two occasions, both in IV-2-b.e, culturally specific text was omitted. One example is provided.

Omission of culturally specific text — Example

IV-2-b.e (Translation): And that's that. The problem has been solved — rapidly and efficiently. ***Straight to the point.*** And we can get on with other matters (and all of us certainly have other things to do these days)!

IV-2-b.f (Original): Et voilà, problème casé. C'est rapide, efficace —***pas de «zigonnage» comme dirait l'annonce publicitaire*** — et on peut alors passer à autre chose (et Dieu sait qu'on en a des choses à faire de nos jours!).

The remaining omissions were distributed throughout this portion of the corpus, with only two articles (IV-2-c.e and IV-5-c.e) containing no omissions at all. Furthermore, no text or information of importance was omitted.

Article	Frequency
IV-1-b.e	3
IV-1-c.e	1
IV-2-b.e	1
IV-2-c.e	—
IV-3-b.e	4
IV-3-c.e	11
IV-4-b.e	3
IV-4-c.e	12
IV-5-a.e	2
IV-5-c.e	--
Total	37

Table 83: *Le Laurentien / The Laurentian*
— Omissions

Omission — Example

IV-3-c.e (Translation): It's nine in the morning. Breakfast is over and seven-year-old Vanessa, just out of Grade 2, *is writing* in her notebook.

IV-3-c.f (Original): Il est 9 h. Le déjeuner terminé, Vanessa, âgée de sept ans, deuxième année complétée, *attache à la queue leu leu les lettre ph* dans son cahier d'exercices.

All of the translations in this portion of the corpus contained additions, as indicated by the statistics provided in the following table.

Article	Frequency
IV-1-b.e	11
IV-1-c.e	1
IV-2-b.e	2
IV-2-c.e	--
IV-3-b.e	1
IV-3-c.e	1
IV-4-b.e	2
IV-4-c.e	6
IV-5-a.e	3
IV-5-c.e	1
Total	28

Table 84: *Le Laurentien / The Laurentian*
—Additions

As shown by the first example provided, most of these additions revealed inside knowledge on the part of the translator or additional research done by the translator to obtain information not provided in the original.

Addition — Example 1

IV-1-b.e (Translation): Monday, February 23. In a conference room in a Montreal hotel, more than 20 engineering supervisors were attending their annual meeting. The sexual harassment awareness workshop was on the agenda; *the video was broken into three segments*, each followed by comments of two discussion leaders representing the committee.

IV-1-b.f (Original): Lundi 23 février. Dans une salle de conférence d'un hôtel de Montréal, plus d'une vingtaine de superviseurs de l'Ingénierie participent à leur réunion annuelle. A l'ordre du jour figure l'atelier de sensibilisation. S'ensuit le vidéo entrecoupé des commentaires des deux animateurs membres du comité.

Yet this is not always the case. The second example shows the translator adding a superfluous image and the third shows the translator making an addition which does effectively change the meaning of the text. This last type of addition occurred infrequently.

Addition — Example 2

IV-5-a.e (Translation): Our shareholder, the federal government, slashed its own expenses in its last budget in an effort to reduce to Canadian deficit. Now it is asking us to follow suit. In other words, the time has come to face the music, take the bull by the horns, *pay the piper* — call it what you will, we have to correct the situation and make Canadian National a profitable railway that you will be proud to work for.

IV-5-a.f (Original): Dans son dernier budget, notre actionnaire, le gouvernement fédéral, a sabré dans les dépenses pour réduire le déficit du pays. Il nous demande de faire la même chose dans notre cour. En d'autres mots, il faut faire face à la musique, prendre le taureau par les cornes, appel ça comme vous voudrez, pour redresser la situation et faire de cette entreprise un chemin de fer pour lequel vous serez fiers de travailler parce qu'il sera rentable.

Addition — Example 3

IV-4-c.e (Translation): In the summer of 1992, she was determined to get accustomed to wearing a prosthesis, but after a few months the pain proved stronger than her courage. "I guess I wasn't really ready," explains Caroline. "When I wore the limb, I cried because it hurt so much, and then when I removed it, I cried *even more* because I wanted to walk."

IV-4-c.f (Original): A l'été 1992, elle est déterminée à s'y habituer mais, après quelques mois, elle abandonne, la douleur ayant raison de son courage. «Je pense que je n'étais pas vraiment prête, reconnaît Caroline. Quand j'avais ma prothèse, je pleurais parce que ça me faisait mal et quand je l'enlevais, je pleurais parce que je voulais marcher.»

Also in the content category, mistranslations and clarification added were both found more frequently than additions and omissions. Specifically, the translators added clarification to all but one of the translated articles (IV-2-c.e), as indicated in the following table.

Article	Frequency
IV-1-b.e	10
IV-1-c.e	2
IV-2-b.e	2
IV-2-c.e	--
IV-3-b.e	9
IV-3-c.e	7
IV-4-b.e	5
IV-4-c.e	10
IV-5-a.e	6
IV-5-c.e	2
Total	59

Table 85: *Le Laurentien / The Laurentian*
— Clarification added

As illustrated by the following example, when this pair of translators added clarification to the translations, they stated what was left unstated and only implied in the original.

Clarification added — Example 1

IV-1-b.e (Translation): But then the committee members knew it would. *They watched plenty of videos* on sexual harassment produced by different organizations and companies, but found them all lacking.

IV-1-b.f (Original): Les membres du comité l'avouent. Aucun vidéo portant sur le harcèlement sexuel réalisé par différents organismes ou entreprises ne les avait satisfaits.

In a similar manner, mistranslation occurred in all but one of the translations (IV-5-c.e), as indicated in the following table.

Article	Frequency
IV-1-b.e	4
IV-1-c.e	5
IV-2-b.e	1
IV-2-c.e	3
IV-3-b.e	2
IV-3-c.e	10
IV-4-b.e	6
IV-4-c.e	16
IV-5-a.e	--
IV-5-c.e	5
Total	52

Table 86: *Le Laurentien / The Laurentian*
— Mistranslations

In the case of this group of translations, mistranslations were the most significant element coded in the content category. As illustrated by the example provided below, these mistranslations do in fact change the meaning of the text and can be considered errors on the part of this pair of translators.

Mistranslation — Example 1

IV-5-c.e (Translation): Senneterre employees, under the supervision of Carman Charles Delisle, worked hard conducting *tests on the route* the cars would take to find out more about the route the cars would take to find out more about conditions.

IV-5-c.f (Original): Du côté des employés de Senneterre, sous la direction de Charles Delisle, wagonnier, on travaillaient assidûment en vue d'effectuer un *test sur la route* qui permettrait d'en savoir davantage.

The remaining items in the content category occurred infrequently. The most frequently coded items concerned the strength of the translated text (five text segments), with the translation being stronger on three occasions (all in IV-3-c.e), and weaker on two occasions (in IV-3-c.e and IV-4-c.e).

Finally, an honorific was added on one occasion (IV-4-c.e), the tone of the text was more positive on one occasion (IV-4-c.e) and three corrections were made with respect to the content (IV-1-c.e, IV-2-c.e and IV-4-c.e), all of which concerned department names which were inaccurate in the original.

b) Style

Relatively little text manipulation was noticed with respect to the second category, style. Specifically, only three of the 13 elements were observed in the category: image deleted, nonsexist usage added and style more formal. The deletion of images cannot be considered significant in the case of this set of translations, since it was observed only once (in IV-1-c.e). Nonsexist usage was observed more frequently: once in IV-2-c.e, twice in IV-3-c.e and eleven times in IV-4-c.e. It is of interest that nonsexist usage was added specifically to one article in a group of articles which made up a feature which was addressed specifically to employees and referred to employees in general and which should probably have used gender neutral language in the original (at least in keeping with company policy on the matter).

The most frequently observed item in this category was style more formal. This magazine was extremely informal in tone. The tone of editorials was frequently very

chatty and feature articles frequently contained joul in quotes from both employees and managers and referred to company manager and officers by first name. No attempt to translate “joul” into English of a similar level was observed and first name references to managers and officers were removed. The statistics are provided, followed by an example.

Article	Frequency
IV-1-b.e	9
IV-1-c.e	1
IV-2-b.e	--
IV-2-c.e	--
IV-3-b.e	2
IV-3-c.e	--
IV-4-b.e	--
IV-4-c.e	2
IV-5-a.e	--
IV-5-c.e	--
Total	14

Table 87: *Le Laurentien / The Laurentian*
— Style more formal

Style more formal — Example

IV-4-c.e (Translation): At his *rehabilitation officer's* request, Richard kept a journal in which he described, in a simple and down-to-earth way, how he coped with his return to work.

IV-4-c.f (Original): Dans le journal qu'il avait convenu d'écrire à la demande de *Nicole*, Richard relate avec simplicité et réalisme comment il vit le retour au travail dans le quotidien.

c) Readability

More text manipulation was noted in the third category: readability. In fact, this is the second largest category following content, with two of the four elements (translation clearer and translation less wordy) being observed and 62 text segments coded. The translations were clearer than the original on a total of 32 occasions, with the element observed in all but one of the translations (IV-5-a.e). The statistics are provided below.

Article	Frequency
IV-1-b.e	1
IV-1-c.e	4
IV-2-b.e	7
IV-2-c.e	4
IV-3-b.e	1
IV-3-c.e	11
IV-4-b.e	2
IV-4-c.e	1
IV-5-a.e	--
IV-5-c.e	1
Total	32

Table 88: *Le Laurentien / The Laurentian*
— Translation clearer

In the case of this portion of the corpus, 'translation clearer' and 'clarification added' are similar in that in both instances the translator chose to state information which had only been implicit in the original explicitly in his/her translation. The difference between the two elements is that in the case of clarification added, the translator actually

added something whereas in the case of translation clearer, the translator was simply more explicit. One example is provided.

Translation clearer — Example

IV-3-c.e (Translation): After a few years of living together, Guylaine has noticed that the *non-biological parent* gives of his or her love less freely to the *non-biological child*.

IV-3-c.f (Original): Après quelques années de vie commune, Guylaine constate que *le deuxième* parent donne moins gratuitement son amour à *l'autre enfant*.

The final element observed in this category, translation less wordy, occurred with approximately the same frequency: a total of 30 times in nine of the ten articles (all but IV-1-b.e). In all of the text segments observed, the original appeared unnecessarily wordy and the translation was more concise and less wordy than the original. The statistics are provided, followed by an example.

Article	Frequency
IV-1-b.e	--
IV-1-c.e	2
IV-2-b.e	5
IV-2-c.e	2
IV-3-b.e	1
IV-3-c.e	8
IV-4-b.e	1
IV-4-c.e	6
IV-5-a.e	4
IV-5-c.e	1
Total	30

Table 89: *Le Laurentien / The Laurentian*
— Translation more concise

Translation more concise — Example

IV-5-c.e (Translation): Then it was up to the team at the Transcona Shops to build 34 of these specialized units.

IV-5-c.f (Original): À partir de ce moment, c'est l'équipe de Transcona qui a pris la relève pour assurer la construction de ce nouveau parc de wagons spécialisés qui comprend 34 unités.

d) Structure

Relatively little manipulation was also noted in the fourth category, structure. Specifically, a total of 23 text segments were coded in six of the 16 elements in this category: agent added, change in person (1st to 3rd), change in person (3rd to 1st), direct quote made indirect, paragraph broken up and paragraphs combined. To start with, the Hyperresearch data supported the data obtained through the calculation of statistics regarding the number of paragraphs. Specifically, on one occasion (IV-4-c.e) a paragraph was broken up and on five occasions (once in IV-1-c.e, once in IV-3-c.e, twice in IV-4-c.e and once in IV-5-c.e) paragraphs from the original were broken up into more than one paragraph in the translation. It is obvious, that this occurred relatively infrequently.

In a similar manner, there was very little manipulation in terms of how quotes were handled. Specifically, on three occasions a direct quote was made into a statement (IV-1-c.e, IV-3-c.e, IV-4-c.e). Contrary to the practices in other vehicles (*Keeping Track / Au fil du rail* and *Eye on Safety / Prévenir*) no statements were used as quotes and no quotes (either direct or indirect) were attributed to other people.

Finally, the only other form of manipulation noted in this category concerned person. Specifically, on three occasions the person used was changed from the first person to the third. Although this type of change occurred very infrequently, it is interesting to note that instead of the inclusive “we” which is used so frequently in vehicles of this nature to include employees in management concerns, the translation used the more distant 3rd person, referring to the company as an outside firm (“CN”). However, this occurred too infrequently — on only three occasions — to be considered indicative of anything whatsoever. Furthermore, this change in person from 1st to 3rd was more than countered by additional changes in person, this time from 3rd to 1st.

e) Terminology

The final category, terminology, showed even less evidence of manipulation in the case of this portion of the corpus. Specifically, only two of the six elements in this category were observed, and only infrequently. In fact, more complicated terminology was used on one occasion (VI-1-c.e) and simpler terminology was also used on one occasion (IV-1-c.e). This is far too infrequent to be indicative of anything at all.

Combinations of elements

The amount of data collected for this set of translations was much less voluminous than that for either *Keeping Track / Au fil du rail* or *Eye on Safety / Prévenir* and somewhat less than that collected for *Rail Lines / Écho Rail*: 10 articles, five categories, 23 elements and 305 text segments. Once again the various elements

observed in this set of translations were examined in terms of the various combinations noted, using the same hypotheses as well as the same categories and combinations of pairs of elements.

a) Hypothesis 1 - Content

The table provided on the following page summarizes the findings with respect to the content of the translations. Nine of the 14 items in this category were observed in this vehicle. This table shows that a number of changes did occur with respect to content and that some of them were observed rather uniformly throughout this portion of the corpus. Specifically, seven of the ten translations in this portion of the corpus contained all four of the elements in this category: additions, omissions, mistranslations and clarification added. Furthermore, two of the three remaining translations contained at least three of the four elements (IV-5-a.e with all but mistranslations and IV-5-c.e, with all but omissions), and one translation contained only mistranslations. It is also of interest that 58.4% of the text segments coded (178 of 305) fall into these four groups. Although the other elements observed in this category occurred rather sporadically, when combined with the four major elements they would appear indicative of a willingness on the part of the translator to meddle with the content and it is precisely this willingness to meddle which may be considered a conscious strategy.

Elements Found									
Article	Additions	Omissions	Mis-translations	Clarification added	Change in tone (more positive or more negative)	Trans. less/more specific	Trans. weaker or stronger	Error / Correction in content	Honorific added/ deleted
IV-1-b.e	X	X	X	X					
IV-1-c.e	X	X	X	X			X	X	
IV-2-b.e	X	X	X	X					
IV-2-c.e			X					X	
IV-3-b.e	X	X	X	X					
IV-3-c.e	X	X	X	X			X		
IV-4-b.e	X	X	X	X					
IV-4-c.e	X	X	X	X	X		X	X	X
IV-5-a.e	X	X		X					
IV-5-c.e	X		X	X					

Table 90: *Le Laurentien* / *The Laurentian* —Elements indicative of changes in content

b) Hypothesis 2 - Style

With respect to the second hypothesis, none of the eight elements which could be indicative of a more neutral style were found in these translations. In a similar manner, only one of the six elements which could be indicative of a less neutral style (style more formal) was found in any of the translations and this occurred on only 14 occasions in only four of the translations. Therefore, there would appear to be very little evidence of any conscious effort on the part of the two translators responsible for this portion of the work to make changes in style.

c) Hypothesis 3 - Readability

The third hypothesis examined concerned the readability of the translations. In the first portion of the corpus analysis, 80% of these English translations scored lower in terms of the readability indices than the originals. Yet, the data collected in this portion of the corpus analysis revealed no clear evidence of decreased readability. Specifically, the only elements noted with any frequency would tend to make the translations more readable than the originals. In fact, clarification was added in the case of all ten translations (on a total of 59 occasions) and nine of the ten translations (all but IV-5-a.e) contained text segments which were coded as translation clearer (a total of 32 occasions). This would tend to indicate that although the translators may have used longer sentences or words with more syllables which would have affected the readability indices, they counteracted this by making a conscious effort to make their translations easier to understand.

d) Hypothesis 4 - Terminology

With respect to the fourth hypothesis concerning changes in terminology, only two of the six elements pertaining to terminology, complicated terminology and simpler terminology, were observed in this set of translations, and on only one occasion each. Therefore, there is no evidence of significant changes made with respect to terminology.

e) Hypothesis 5 - Structure

The statistical analysis of these translations revealed that while there may have been some effort on the part of these translators to reduce the length of the texts, there was relatively little structural change in terms of paragraphs and sentence. Furthermore, the comparison of the translations to the originals revealed only little change structural change with the translators making no changes in terms of the agents of actions, making only occasional changes in person, and rare changes with respect to breaking up or combining paragraphs. None of these elements was observed with any significant frequency and none of the translations contained more than four of these elements at a time. Therefore, it may be concluded, that there was little structural change in these translations.

f) Hypothesis 6 - Explication

Finally, the combinations of elements were examined in order to determine whether there was an effort on the part of the translator to explicate. Three of the elements which would indicate that the translator does explicate (translation more

concise, clarification added, and translation clearer) were all noticed in nine out of ten translations (translation more concise was not observed in IV-1-b.e; clarification added was not observed in IV-2-c.e; and translation clearer was not found in IV-5-c.e). The only other element from this category which was found in the translations was correction made in content (found in IV-1-c.e, IV-2-c.e and IV-4-c.e). Of the elements which would mitigate against any conclusion that the translators were explicating, only one was found in this portion of the corpus (translation weaker was found once each in IV-3-c.e and IV-4-c.e). This data would appear to indicate some efforts on the part of the translator to explicate.

Article	Elements Found							
	Correction made in content	Trans. more specific	Repetition added	Emphasis added	Trans. more concise	Agent added	Clarifi. added	Trans. clearer
IV-1-b.e							X	X
IV-1-c.e	X				X		X	X
IV-2-b.e					X		X	X
IV-2-c.e	X				X			X
IV-3-b.e					X	X	X	X
IV-3-c.e					X		X	X
IV-4-b.e					X		X	X
IV-4-c.e	X				X		X	X
IV-5-a.e					X		X	
IV-5-c.e					X		X	X

Table 91: *Le Laurentien* / *The Laurentian* — Elements indicative of explication on the part of the translator

À la pointe du futur / Point to the future

This is the second of the two vehicles in the corpus which was translated from French to English and the translations were produced by the same pair of translators working in CN's Linguistic Services department. As in the case of *Le Laurentien / The Laurentian*, there was no way of identifying which of the translators worked on which texts. A total of 24 of the 52 elements (46.2%) coded were observed in this vehicle. This is fewer than the 47 elements observed in the *Keeping Track / Au fil du Rail* translations, the 35 elements noted in the *Eye on Safety / Prévenir* translations, the 28 elements found in *Rail Lines / Écho Rail*, and similar to the 21 elements found in *Le Laurentien / The Laurentian*. Once again, although some of the elements occurred on multiple occasions, as in the case of the first four vehicles studied, many occurred relatively infrequently or even only once. A total of 291 text segments were coded in the 12 translations studied. This, too, is much fewer than the 1,099 coded for the 18 *Keeping Track / Au fil du rail* translations and the 524 coded for the seven *Eye on Safety / Prévenir* translations, and slightly less than the 347 text segments coded for the 10 *Rail Lines / Écho Rail* translations and the 306 text segments coded for the 10 *Le Laurentien / The Laurentian* translations.

It is interesting to note that this set of translations contained both of the elements which have been identified as indicative of unidiomatic translation, awkward structure and grammar mistakes. Both of these elements are discussed in further detail in the section concerning structure.

a) Content

Once again, the largest number of elements were observed in the content category, with a total of 165 text segments coded in 10 of the 14 groups in this category (the four elements not observed were change in tone - more negative, change in tone - more positive, translation less specific and translation more specific). This accounts for 58.5% of the total number of text segments coded, which although it is similar to the percentages found for *Keeping Track / Au fil du rail* (63.6%), *Eye on Safety / Prévenir* (68%), and *Rail Lines / Écho Rail* (67.4%), and *Le Laurentien / The Laurentian* (62.3%). It is, however, the first vehicle for which the percentage of text segments coded in the content category was less than 60%.

As in the case of all the first four vehicles studied, the four largest groups were omissions (20 text segments), additions (37 text segments), clarification added (40 text segments), and mistranslations (39 text segments). As in the case of the first three vehicles studied, I had expected to find omissions. Yet, once again, I found no omissions of significant portions of text (in terms of size). Although the omissions were distributed throughout this portion of the corpus, three articles (V-2-a.e, V-3-b.e and V-3-c.e) contained no omissions. The statistics are provided below.

Article	Frequency
V-1-a.e	5
V-1-b.e	1
V-1-c.e	1
V-2-a.e	--
V-2-b.e	1
V-2-c.e	2
V-3-a.e	1
V-3-b.e	--
V-3-c.e	--
V-4-a.e	5
V-4-b.e	2
V-4-c.e	2
Total	20

Table 92: *À la pointe du futur / Point to the Future* — Omissions

Yet, as can be seen from the examples provided below, although these omissions were not significant in terms of text length, they were not always as benign in terms of meaning as those omissions made by the same two translators in the case of *Le Laurentien / The Laurentian*. For the most part, the type of material omitted could be considered details. As illustrated by the first example, it is obvious that the translators felt that certain details should be understood.

Omission — Example 1

V-1-c.e (Translation): But all the work accomplished by the team would have been in vain were it not for the agreement reached between the unions and management.

V-1-c.f (Original): Mais tous ces efforts n'auraient pas abouti sans l'entente intervenue entre les syndicats *signataires* et la direction.

Yet, as shown in the second example, the translators occasionally omitted details which could be considered as contributing to the meaning or flavour of the text.

Omission — Example 2

V-2-c.e (Translation): Today, AMF, through its leaders, participates actively in the economic recovery of Montreal's south-west area.

V-2-c.f (Original): De nos jours, la direction *éclairée* d'AMF *et ses employés* participent activement, par leurs initiatives, au redressement économique de la région du Sud-Ouest.

In both cases, it is interesting to note that the translator felt justified in determining what pieces of information should or should not be included in the text, based on his/her judgement of its relevance.

All of the translations in this portion of the corpus contained additions, as indicated by the statistics provided in the following table.

Article	Frequency
V-1-a.e	2
V-1-b.e	3
V-1-c.e	1
V-2-a.e	3
V-2-b.e	7
V-2-c.e	1
V-3-a.e	2
V-3-b.e	6
V-3-c.e	4
V-4-a.e	4
V-4-b.e	3
V-4-c.e	1
Total	37

Table 93: *À la pointe du futur / Point to the Future* — Additions

The additions made by these two translators fall into two categories. The first category includes those additions which would appear to have been made for stylistic reasons (adding material where the original is considered to be too direct or too abrupt).

Addition — Example 1

V-4-CE (Translation): *It was apparent from the frenzy of last-minute activity and preparations that an important announcement was to be made.* At 8:30, Alphonse Giard, vice-president, Law, and secretary of CN, Marie-Andrée Prénouveau, general secretary, and Margriet Zwarts from the law firm of Ogilvy Renault, Élyse Desforbes, executive assistant, AMF, and Michel Martineau, attorney, sat down to review the incorporation documents.

V-4-c.f (Original): À 8 h 30. Le vice-président des Affaires juridiques et secrétaire général du CN, Me Alphonse Giard, la secrétaire générale déléguée, Marie-Andrée Prénouveau, Margriet Zwarts, d'Ogilvy Renault, l'adjointe exécutive d'AMF, Élyse Desforbes, de même que Michel Martineau, procureur général associé ont commencé à se passer les documents.

Although, generally relatively minor in nature, the second type of addition reveals a certain opinion or judgement on the part of the translators of the situation being described in the text.

Addition — Example 2

V-1-a.e (Translation): The results of this partnership were abundant in 1992 - the Métro project, the bus project, joint representation at *key* US trade shows, and during tours of the facility by customers and political dignitaries.

V-1-a.f (Original): D'ailleurs, les exemples de partenariat se sont multipliés en 1992 que ce soit pour le projet du métro, celui des autocars, lors des expositions aux États-Unis et pour des visites politiques ou avec des clients.

The third significant element in the content category for this vehicle was clarification added. This element was found on at least one occasion in each of the twelve translations, as illustrated in the following table.

Article	Frequency
V-1-a.e	8
V-1-b.e	2
V-1-c.e	4
V-2-a.e	4
V-2-b.e	2
V-2-c.e	5
V-3-a.e	3
V-3-b.e	2
V-3-c.e	1
V-4-a.e	3
V-4-b.e	3
V-4-CE	3
Total	40

Table 94: *À la pointe du futur / Point to the Future* — Clarification added

As they also did with their translations of *Le Laurentien / The Laurentian*, these two translators added clarification by stating explicitly information that was only implied in the original.

Clarification added — Example 1

V-2-b.e (Translation): This is not to say that nothing at all has been done *in the area of R&D*.

V-2-b.f (Original): Cela ne veut pas dire que nous n'avons rien fait.

Yet, in the case of this vehicle, they carried this tendency to make things more explicit to a higher level, as illustrated by Example 2, in which they explicitly state what is only very vaguely referred to in the original.

Clarification added — Example 2

V-2-a.e (Translation): Having accepted this new world order as a fait accompli, isn't it better that we try to understand the ways and practices of potential customers so that we know who we are dealing with and how to conduct business with them?

V-2-a.f (Original): Ceci dit, mieux vaut connaître ces clients potentiels, mieux vaut les comprendre. Savons-nous à qui nous parlons?

And not stopping there, this pair of translators continued even further along with this tendency, as illustrated in Example 3. This form of exaggerated clarification occurred only once in this portion of the corpus.

Clarification added — Example 3

V-3-b.e (Translation): It seems that it's often easier to build elaborate excuses and round-about reasons for not having completed certain projects. How often do you hear "But I asked someone for that a long time ago, I can't do anything about it until he or she gets back to me", or "I couldn't do what you asked me for last week because "A", "B", and "C" all happened at the same time, and that caused "D" to be delayed, and "E" turned out to not be what it was supposed to be, and then the file for "F" got lost and "G" was delivered to the wrong place and sat there for a month before "H" realized that it was even there, and "I" came up out of the blue and shifted priorities, so "J" became more urgent as a result. So we'll try to look after the stuff you asked for, but since we're so short-staffed you'll be lucky if it happens before the holidays."

V-3-b.f (Original): Il semble qu'il soit plus facile de trouver des excuses et des raisons compliquées de ne pas avoir achevé certains projets. Combien de fois entend-on: «Mais j'ai demandé cela à telle personne et je ne peux rien faire tant que je n'ai de réponse», ou: «Je n'ai pas pu faire ce que vous m'avez demandé la semaine dernière parce que tels événements se sont produits en même temps, ce qui a retardé tel autre événement, parce qu'une telle activité n'a pas donné les résultats prévus, que tel dossier a été égaré, que tel document a été livré au mauvais endroit et qu'il s'est écoulé un mois avant que telle personne ne se rende compte qu'il était là et que tel imprévu a modifié les priorités de sorte que tel dossier est devenu plus urgent. Nous allons tenter de nous en occuper, mais comme nous avons si peu de personnel, vous pouvez vous compter chanceux si nous y arrivons avant les Fêtes.»

The fourth significant element in the content category, mistranslations, occurred in all but one of the translations (V-2-CE), as illustrated by the following table.

Article	Frequency
V-1-a.e	1
V-1-b.e	5
V-1-CE	2
V-2-a.e	1
V-2-b.e	10
V-2-CE	--
V-3-a.e	3
V-3-b.e	3
V-3-CE	1
V-4-a.e	1
V-4-b.e	8
V-4-CE	4
Total	39

Table 95: *À la pointe du futur / Point to the Future* — Mistranslations

Once again, as in the case of the *Le Laurentien / The Laurentian* translations, the mistranslations do in fact change the meaning of the text and can be considered errors on the part of this pair of translators. The example provided is particularly revealing of a certain degree of ignorance of corporate structure on the part of the translators. CN Rail is not a division of the company, it is an earlier name for the company, which at the time this article was written went by the name CN North America.

Mistranslation — Example 1

V-4-CE (Translation): Incorporation of AMF will see our status changed *from being a function of CN's rail division* to a full-fledged subsidiary of the corporation with our own management structure and board of directors. The board will comprise a number of external directors.

V-4-c.f (Original): Par sa constitution en société, AMF *cesse d'être une division de CN RAIL* pour devenir une filiale à part entière du CN, cotée de sa propre structure de gestion ainsi que de son propre conseil d'administration, lequel comprendra des administrateurs de l'extérieur.

The remaining elements observed in the content category occurred relatively infrequently. The most frequently observed concerned the strength of the translation: translation stronger and translation weaker each occurred a total of seven times in this portion of the corpus.

As in the case of the other portions of the corpus, these two translators also corrected errors they noted in the original a total of nine times (once in V-2-CE, once in V-3-CE, six times in V-3-CE, and once in V-4-b.e), while also making errors in content on two occasions (both in V-1-CE). Finally, honorifics were added on three occasions and deleted on one occasion.

b) Style

As in the case of the other vehicles analyzed, the second category of elements observed was style. In the case of *À la pointe du futur / Point to the future*, there was extremely little text manipulation in this category. A total of three of the 13 elements possible were observed: emphasis added, style more formal, and non-sexist usage added. Furthermore, a total of 15 text segments were coded. Specially, emphasis added was observed on four occasions (two in V-2-a.e and two in V-2-b.e), style more formal was observed on ten occasions (two in V-1-CE, one in V-2-a.e, six in V-2-b.e and one in V-4-CE), and nonsexist usage was added on one occasion (V-3-b.e).

c) Readability

Slightly more text manipulation was observed in the third category: readability. Specifically, two of the four categories of elements were observed (translation clearer and translation more concise) and a total of 50 text segments were coded. These text segments were split roughly evenly between the two categories and distributed fairly evenly throughout this portion of the corpus, as illustrated in the tables provided below.

Article	Frequency
V-1-a.e	2
V-1-b.e	5
V-1-c.e	2
V-2-a.e	3
V-2-b.e	1
V-2-c.e	6
V-3-a.e	--
V-3-b.e	1
V-3-c.e	2
V-4-a.e	3
V-4-b.e	1
V-4-c.e	--
Total	26

Table 96 : *À la pointe du futur /*
Point to the Future — Translation clearer

Article	Frequency
V-1-a.e	3
V-1-b.e	3
V-1-c.e	2
V-2-a.e	5
V-2-b.e	--
V-2-c.e	--
V-3-a.e	--
V-3-b.e	1
V-3-c.e	3
V-4-a.e	3
V-4-b.e	3
V-4-c.e	1
Total	24

Table 97 : *À la pointe du futur /*
Point to the Future — Translation more concise

It is interesting to note that, in keeping with the efforts observed through the analysis of the reading indices for this vehicle to increase readability through reduced sentence length, the only two elements observed in the readability category of this portion of the analysis also serve to improve readability.

d) Structure

There was slightly less text manipulation observed in the fourth category: structure. Namely, although seven of the 16 categories were observed, only 40 text segments were coded: awkward structure, change in order, change in person (1st - 3rd), change in person (3rd to 1st), grammar mistake, paragraphs broken up, paragraphs combined. Furthermore, none of the elements observed occurred on any consistent basis throughout this portion of the corpus. The largest number of text segments coded involved awkward structure. The statistics are provided below.

Article	Frequency
V-1-a.e	--
V-1-b.e	--
V-1-c.e	--
V-2-a.e	1
V-2-b.e	6
V-2-c.e	1
V-3-a.e	--
V-3-b.e	2
V-3-c.e	2
V-4-a.e	--
V-4-b.e	--
V-4-c.e	--
Total	11

Table 98 : *À la pointe du futur / Point to the Future* — Awkward structure

This is an interesting error on the part of these two translators who both publicly criticized the quality of the writing of the original French texts and appear to have made conscious efforts to make their translations more readable than the originals. As illustrated in the example provided below, this type of error involved the use of passive sentence structures where an active would have been more common usage and more readable.

Awkward structure — Example

V-2-a.e (Translation): Becoming the #1 multinational in manufacturing and remanufacturing transportation systems is the mission we have adopted.

V-2-a.f (Original): Notre mission est d'être la première entreprise multinationale de reconstruction et remise à neuf du matériel roulant.

This error is even more interesting when combined with the fact that they also made a total of nine grammar mistakes (Three in V-1-CE, five in V-2-b.e, and one in V-2-CE), more than found in any of the other vehicles in this corpus. This, as stated earlier, is the only portion of the corpus which contained both elements, awkward structure and grammar mistake, which can be considered indicative a unidiomatic translation.

The next largest number of text segments were coded in the two groups concerning the person used. Specifically, on five occasions the person was changed from the first to the third and on nine occasions it was changed from the third to the first. In the case of this type of change, remarks attributed to the president of the corporate unit for which this vehicle was produced, referred to the group as a whole rather than to the president as an individual while at the same time remarks about the corporate unit (AMF) referred to the unit from the third person rather than in a collective first person (a more

neutral 'it' rather than a personalized 'us'). Yet, this type of change occurred relatively infrequently in the twelve translations making up this portion of the corpus, too infrequently to be of more than passing interest.

In a similar manner, changes in terms of paragraph structure were also relatively infrequent. In fact, on one occasion (V-4-b.e) a paragraph was broken into two paragraphs and on five occasions (V-1-a.e, V-1-CE, V-2-CE, V-4-a.e, and V-4-CE) paragraphs were combined. This is in keeping with the data observed for the first four vehicles in this corpus.

Finally, one change in word order was observed (in (V-1-a.e). As illustrated in the example, the hierarchy was descending in the original and ascending in the translation. Since this occurred only once, it cannot be considered significant.

Change in order — Example

V-1-a.e (Translation): It is my fervent hope that we can continue this partnership, and I urge all managers *from first line supervisors to senior management*, to make concrete efforts on the floor to pursue harmonious labour-management cooperation.

V-1-v.f (Original): Mon désir le plus grand est de soutenir cette lancée et d'encourager tous les cadres, *en partant de la haute direction jusqu'au cadre de premier niveau*, à travailler à entretenir concrètement, sur le plancher, des rapports syndicaux-patronaux qui favorisent une collaboration étroite et totale.

e) Terminology

A similar lack of text manipulation was also observed in the final category, terminology. Only one element was observed (complicated terminology) and on only 12 occasions. The statistics are provided below.

Article	Frequency
V-1-a.e	--
V-1-b.e	--
V-1-c.e	1
V-2-a.e	2
V-2-b.e	4
V-2-c.e	1
V-3-a.e	1
V-3-b.e	--
V-3-c.e	2
V-4-a.e	1
V-4-b.e	--
V-4-c.e	--
Total	12

Table 99 : *À la pointe du futur / Point to the Future*— Complicated terminology used

It is interesting to note that, as illustrated in the example provided below, all instances of this element involved the same words. Specifically, on all 12 occasions, these two translators translated French terms such as ‘trains’ and ‘matériel roulant’ as ‘transportation systems’. However, it would only be significant had it occurred more frequently.

Complicated terminology — Example

V-2-a.e (Translation): Becoming the #1 multinational in manufacturing and remanufacturing transportation systems is the mission we have adopted.

V-2-a.f (Original): Notre mission est d’être la première entreprise multinationale de reconstruction et remise à neuf du matériel roulant.

Combinations of elements

The amount of data collected for this set of translations was much less voluminous than that for either *Keeping Track / Au fil du rail* or *Eye on Safety / Prévenir*, somewhat less than that collected for *Rail Lines / Écho Rail*, and quite similar to that collected for *Le Laurentien / The Laurentian*: 12 articles, five categories, 23 elements and 282 text segments. Once again, the various elements observed were examined in terms of the various combinations noted, using the same six hypotheses as well as the same categories and combinations of pairs of elements.

a) Hypothesis 1 - Content

The table provided on the following page summarizes the findings with respect to the content of the translations. Ten of the 14 items in this category were observed with respect to this vehicle. This table indicates that a number of changes did occur with respect to content and that some of them were observed rather uniformly throughout this portion of the corpus. Specifically, seven of the 12 translations in this portion of the corpus contained all four of the major elements in this category: additions, omissions, mistranslations and clarification. Furthermore all five remaining translations contained three of the four elements. It is also of interest that 58.5% of the text segments coded (165 of 282) fall into these four groups. Although only six of the other elements in this category were observed and with no great frequency for that matter, there would still

appear to be a willingness on the part of the translator to make changes with respect to content and this may be considered a conscious strategy on the part of the translator.

Article	Elements Found								
	Additions	Omissions	Mis-translations	Clarification added	Change in tone (more positive or more negative)	Trans. less/more specific	Trans. weaker or stronger	Error / Correction in content	Honorific added/ deleted
V-1-a.e	X	X	X	X			X		X
V-1-b.e	X	X	X	X			X		
V-1-CE	X	X	X	X			X	X	
V-2-a.e	X		X	X					
V-2-b.e	X	X	X	X					
V-2-CE	X	X		X			X	X	X
V-3-a.e	X	X	X	X			X	X	
V-3-b.e	X		X	X					
V-3-CE	X		X	X				X	
V-4-a.e	X	X	X	X					
V-4-b.e	X	X	X	X			X	X	X
V-4-CE	X	X	X	X					

Table 100: *A la pointe du futur / Point to the Future* — Element indicative of changes in content

b) Hypothesis 2 - Style

With respect to the second hypothesis, concerning style, only two of the elements which could be considered indicative of a more neutral style were found in these translations and only very infrequently. In a similar manner, only one of the six elements which could be indicative of a less neutral style (style more formal) was found in any of the translations and this occurred on only 10 occasions in only four of the translations. Therefore, there would appear to be very little evidence of any conscious effort on the part of the two translators responsible for this portion of the corpus to make changes in style.

c) Hypothesis 3 - Readability

The third hypothesis examined concerned the readability of the translations. In the first portion of the corpus analysis, two-thirds of these English translations scored lower in terms of the readability indices than the originals. Yet, the data collected in this portion of the corpus analysis revealed no clear evidence of decreased readability. Specifically, only one element which could be indicative of decreased readability was noted (the use of complicated terminology) and with no great frequency (12 occurrences in seven translations). Furthermore, the only elements noted with any frequency would tend to make the translations more readable than the originals. In fact, clarification was added in the case of all 12 translations (on a total of 40 occasions) and ten of the 12 translations (all but V-3-a.e and V-4-CE) contained text segments which were coded as

translation clearer (a total of 26 occasions). This would tend to indicate an effort on the part of the translators to make their translations more readable than the originals.

d) Hypothesis 4 - Terminology

The fourth hypothesis concerned changes in terms of terminology. Only one of the six elements pertaining to terminology, complicated terminology, was observed in this set of translations, and on only 12 occasions in seven of the translations. Therefore, there is no evidence of significant changes made with respect to terminology.

e) Hypothesis 5 - Structure

The statistical analysis of these translations revealed that while there may have been some effort on the part of these translators to reduce the length of the texts, there was relatively little structural change in terms of paragraphs and sentences. Furthermore, the comparison of the translations to the originals revealed only little structural change with the translators making no changes in terms of the agents of actions, making only occasional changes in person, and rare changes with respect to breaking up or combining paragraphs. None of these elements was observed with any significant frequency and none of the translations contained more than two of these elements at a time. Therefore, it may be concluded, that there was little structural change in these translations.

f) Hypothesis 6 - Explication

Finally, the combinations of elements were examined in order to determine whether there was an effort on the part of the translator to explicate. Three of the elements which could indicate efforts on the part of the translator to explicate (translation more concise, clarification added, and translation clearer) were all noticed in nine out of 12 translations. The only other element from this category which was found in the translations was correction made in content (found in 25% of the translations). Of the elements which would mitigate against any conclusion that the translators were explicating only two were found in this portion of the corpus and with no great frequency. This data would appear to indicate some efforts on the part of the translator to explicate.

Article	Elements Found							
	Correction made in content	Trans. more specific	Repetition added	Emphasis added	Trans. more concise	Agent added	Clarifi. added	Trans. clearer
V-1-a.e					X		X	X
V-1-b.e					X		X	X
V-1-CE					X		X	X
V-2-a.e					X		X	X
V-2-b.e							X	X
V-2-CE	X						X	X
V-3-a.e	X						X	
V-3-b.e					X		X	X
V-3-CE	X				X		X	X
V-4-a.e					X		X	X
V-4-b.e	X				X		X	X
V-4-CE					X		X	

Table 101 : *À la pointe du futur / Point to the Future* — Elements indicative of explication on the part of the translator

This portion of the corpus was by far the smallest, with only four translations to be studied. In keeping with the trend observed in the translations of the other five vehicles, this portion of the corpus contained nothing of note which could be considered as rendering it an unidiomatic translation. No unidiomatic turns of phrases, no anglicisms, no grammar mistakes were observed. There was one interesting observation in this respect, however. Although the other translations in the five other portions of the corpus occasionally contained English terminology, in the case of names of organizations (such as the Federal Railroad Association, which is an American agency with no French name) or corporations (such as Go Transit or Burlington Northern, both railways which have no French names), one article in this portion of the corpus did contain a job title in English, which was then translated into French in parentheses. Although this handling of the job title could be considered along the same lines as the organization and corporate names cited above, since the job in question was for an American firm, there would not really appear to be any need for this. This usage does serve to indicate that the individual in question was working outside of Quebec or Canada, which was already clear. It might also serve as an indication of a very minor lapse in the idiomatic translation strategy. Once again, as in the other portions of the corpus, idiomatic translation seems to be the basic translation strategy through an absence of any indication of unidiomatic translation and the data seems to point towards other strategies as well.

Only 18 of the 52 elements (34.6%) coded were observed in this vehicle. This is less than in any of the other vehicles (47 in *Keeping Track / Au fil du Rail*, 35 in *Eye on Safety / Prévenir*, 28 in *Rail Lines / Écho Rail*, 21 elements in *Le Laurentien / The Laurentian*, and 24 in *À la pointe du futur/ Point to the Future*). Once again, although a few of the elements occurred on multiple occasions, many occurred relatively infrequently or even only once. A total of 325 text segments were coded in the four translations studied. This was somewhat surprising when compared with the other vehicles, given the small size of this portion of the corpus. Namely, although it was less, as expected, than the 1,099 text segments code for the 18 *Keeping Track / Au fil du rail* translations, it was high when compared to the 524 coded for the seven *Eye on Safety / Prévenir* translations, the 347 text segments coded for the 10 *Rail Lines / Écho Rail* translations, the 306 text segments coded for the 10 *Le Laurentien / The Laurentian* translations, and the 291 text segments coded for the 12 *À la pointe du futur/ Point to the Future* translations.

a) Content

Once again, the largest number of elements were observed in the content category, with a total of 143 text segments coded in six of the 14 groups in this category (the eight elements not observed were change in tone - more negative, change in tone - more positive, correction made in content, error made in content, translation less specific, translation more specific, translation stronger and translation weaker). This accounts for 44% of the total number of text segments coded, which is less than the percentages found

in any of the other vehicles: *Keeping Track / Au fil du rail* 63.6%, *Eye on Safety / Prévenir* 68.6%, *Rail Lines / Écho Rail* 67.4%, *Le Laurentien / The Laurentian* 62.3%, and *À la pointe du futur / Point to the Future* 58.5%. This was the only vehicle for which the percentage of text segments coded in the content category was less than 50%.

As in the case of all the other five vehicles studied, the four largest groups were omissions (18 text segments), additions (22 text segments), clarification added (60 text segments), and mistranslations (34 text segments). As always, I had expected to find omissions. Yet, once again, I found no omissions of significant portions of text (in terms of size). Moreover, the omissions were not distributed evenly throughout the text, but were concentrated in the first translation, as shown in the table provided below.

Article	Frequency
VI-1-a.f	10
VI-1-c.f	2
VI-2-a.f	3
VI-2-c.f	3
Total	18

Table 102: *Inforum* — Omission

Finally, no major portions of text, in terms of meaning, were omitted. The omissions all concerned details, as illustrated in the example provided below.

Omission — Example

VI-2-CE (Original): We will look at new elements *from business* and from technology that will affect the current situation, establish a target and transition plans.

VI-2-c.f (Translation): Nous envisagerons de nouveaux éléments d'un point de vue technique qui influenceront sur la situation actuelle. Nous établirons une cible et des plans de transition.

All of the translations in this portion of the corpus contained additions. Yet, once again, they were not distributed evenly throughout this portion of the corpus, as indicated by the statistics provided in the following table.

Article	Frequency
VI-1-a.f	9
VI-1-c.f	4
VI-2-a.f	4
VI-2-c.f	5
Total	22

Table 103: *Inforum* — Additions

The additions can be divided into three categories. First, there are what I refer to as stylistic additions. Namely, the translator added material to smooth the flow or connections between sentences. Most of the additions were of this type. An example is provided.

Addition - Example 1

VI-1-CE (Original): The other thing about CN is that it is a much lighter organization. Anything lighter flies higher.

VI-1-c.f (Translation): De plus, le CN a beaucoup rationalisé son exploitation. *Et on sait que* tout ce qui est léger s'élève haut.

In the second type of addition, the translator would appear to be expressing a judgement with respect to the statements being made. For instance, in the example provided below, the translator changed “allocation of resources” to “correct allocation of resources”.

Addition — Example 2

VI-1-a.e (Original): The issue we face is allocation of resources as there will always be more demand than supply for resources.

VI-1-e.f (Translation): La difficulté sera de *répartir correctement* nos ressources, car la demande excédera l'offre.

Finally, with the third type of addition (and this occurred only once), the translator reveals her view of the company. Specifically, the translator reveals her discomfort with referring to a senior executive by her first name when speaking to employees. In the case of the original article, the writer merely transcribed what the speaker actually said, whereas the translator modified the text in keeping with her view of hierarchy at CN. It is of interest that this translator was the oldest in the group of translators whose work was studied, that she was in her 60s and quite close to retirement. Although a larger corpus

would be needed to study this in further depth, it would be interesting to be able to determine if translation strategy varies with the age of the translator.

Addition — Example 3

VI-1-a.e (Original): He was concerned that our people were adequately trained, and that we had a proper mechanism to do so. Louise commissioned an independent review of the training resources. Those training resources had resided in Operations, HR and IS.

VI-1-a.f (Translation): Il veut que nous disposions des moyens nécessaires pour former correctement notre personnel. Louise *Piché* a donc commandé à des consultants indépendants une étude de nos ressources en formation (Exploitation, Ressources humaines et Systèmes d'information).

The largest number of text segments coded in the content category involved the addition of clarification. Specifically, clarifying material was added to the translations on a total of 60 occasions, as illustrated in the table below. This would appear to be quite considerable, considering the fact that there are only four translations in this portion of the corpus. It compares to 105 times for the 12 *Keeping Track / Au fil du Rail* translations; 20 times for the seven *Eye on Safety / Prévenir* translations, 49 times for the ten *Rail Lines / Écho Rail* translations, 59 times for the ten *Le Laurentien / The Laurentian* translations and 40 times for the 12 *À la Pointe du futur / Point to the future* translations.

Article	Frequency
VI-1-a.f	24
VI-1-c.f	11
VI-2-a.f	11
VI-2-c.f	14
Total	60

Table 104: *Inforum* —
Clarification added

In all cases, as illustrated by the example provided below, text was added to make concepts and statements which were implicit in the original explicit in the translation. None of these added text segments was significant either in terms of length or in terms of content.

Clarification added — Example

VI-2-a.e (Original): *The last area* is dollars, i.e. what investment we need, what returns, etc.

VI-2-c.f (Translation): Le dernier aspect *du plan* concerne les capitaux.

Mistranslation was another important element in the content category. In fact, mistranslation was second only to clarification added. Although mistranslation was observed in all of the four translations, mistranslations were not distributed evenly throughout this portion of the corpus, as illustrated by the table which follows.

Article	Frequency
VI-1-a.f	14
VI-1-c.f	1
VI-2-a.f	2
VI-2-c.f	17
Total	34

Table 105: *Inforum* —Mistranslation

In the case of this portion of the corpus, the mistranslations made by this translator would not appear to be caused by misunderstanding of the original (in the sense that the translator inadvertently says something totally different than the original as in the case of saying the opposite which could occur if she had missed a word or two from the original) , or to be caused by a skirting around the original meaning, but would appear more likely to be changes made by the translator, reflecting her opinion or even bias with respect to certain matters or events. Specifically, in the example provided, the original is talking about corporations with fewer human resources, which the translator translates into corporations which use their resources better. This type of change cannot be considered accidental, since it occurred a total of 34 times in four translations, but has to be considered deliberate.

Mistranslation — Example

VI-1-a.e (Original): We are not unique in this. The corporate world is becoming more competitive, *leaner*, more time-sensitive, and interdependent.

VI-1-a.f (Translation): Je précise que nous ne sommes pas les seuls dans cette situation. Le milieu d'affaires se caractérise aujourd'hui par une vive compétition, *un usage judicieux des ressources*, l'interdépendance et la sensibilité au temps.

Finally, the remaining two elements (honorific added and honorific deleted) were observed on a few occasions throughout this corpus (honorifics were added on six occasions and deleted on three occasions. Although neither occurred with any great frequency or regularity, they could be indicative of the translator's view of corporate hierarchy, especially when considered along with the specific addition she made with respect to one senior manager (as illustrated in the second example provided for the element "addition"). However, a larger corpus would be required to determine if this was a deliberate strategy on the part of this translator.

b) Style

Very little text manipulation was observed in the second category: style. Only four of the possible 13 elements were observed: nonsexist usage added, repetition deleted, style more formal and style less formal. Furthermore, only 5.2% of the text segments coded (17 out of 325) were in this category. The largest number of text segments coded involved the deletion of repetition, which occurred on ten occasions. Once again, as illustrated in the table provided below, this element was not observed regularly throughout the corpus, but was concentrated in the first translation.

Article	Frequency
VI-1-a.f	7
VI-1-c.f	1
VI-2-a.f	1
VI-2-c.f	1
Total	10

Table 106: *Inforum* —Repetition deleted

It should be noted that the original articles in this portion of the corpus were largely taken from speeches or interviews. The English originals were very close to the speech or interview and the writer frequently merely transcribed what was said. I would say that this is the portion of the corpus in which the writer of the originals put the least effort into her work. It should also be noted that she also had no formal training as a writer. Furthermore, as can be seen in the example provided below, the translator tended to eliminate the type of repetition that is found more frequently in oral than written language. This could be considered a clear effort on her part to improve on the original.

Repetition deleted — Example

VI-1-a.e (Original): Every dollar that this company makes comes from its customers. They pay for every computer terminal, they pay for every piece of software, they pay every salary.

VI-1-a.f (Translations): Le CN tire tous ses produits d'exploitation de sa clientèle. Le client paie nos ordinateurs, nos logiciels et nos salaires.

The remaining three elements in this category occurred very infrequently. Nonsexist usage was added on a total of four occasions (twice in VI-1-a.f, once in VI-1-c.f, and once in VI-2-a.f). In a similar manner, style less formal occurred on two

occasions (once each in VI-1-a.f and IV-1-c.f) and style more formal was observed on one occasion (in VI-1-a.f).

c) Readability

Far more text manipulation was observed in the third category: readability. In fact, although only two of the possible four elements were observed (translation clearer and translation more concise), 41.8% of the text segments coded in this portion of the corpus (136 out of 325) were in this category. The largest portion of these text segments (80.1%) involved occasions when the translator made her text clearer or easier to understand than the original. Once again, this did not occur evenly across this portion of the corpus, but was concentrated in the first and last translations. The statistics are provided in the table below.

Article	Frequency
VI-1-a.f	25
VI-1-c.f	1
VI-2-a.f	6
VI-2-c.f	17
Total	109

Table 107: *Inforum* — Translation clearer

The two examples provided below clearly reveal how poorly written the originals were on occasion, how unclear the text could be considered, and how the translation is in fact superior to or clearer than the original.

Translation clearer — Example 1

VI-1-a.e (Original): Secondly, to ensure that we have early warnings of off-plan conditions.

VI-1-a.f (Translation): Ensuite, pour être sûrs de détecter rapidement toute déviation par rapport aux plans.

Translation clearer — Example 2

VI-2-c.e (Original): There is a lot to do in this area because telecommunications at CN is fragmented right now. There is fragmentation between data and voice. Within data, there is fragmentation between telecommunications directly associated with train control and telecommunications that is more of an IS nature. There is even fragmentation between software and hardware telecommunications.

VI-2-c.f (Translation): Il y a énormément à faire dans ce domaine, car les télécommunications sont actuellement morcelées au CN. Les domaines téléphonie et systèmes de données sont dissociés. Du côté des systèmes des données, les télécommunications directement associées au contrôle des trains sont distinctes de celles qui sont davantage apparentées au SI. Il existe même une séparation entre les télécommunications reliées aux logiciels et celles qui concernent le matériel informatique.

The second element observed in this category, translation more concise, accounted for the remaining almost 20% of the elements observed which affect readability. Once again, as illustrated in the table provided below, this element did not occur evenly throughout these four translations but much more frequently in the first one.

Article	Frequency
VI-1-a.f	14
VI-1-c.f	1
VI-2-a.f	5
VI-2-c.f	7
Total	27

Table 108: *Inforum* — Translation more concise

As illustrated by the example, with this type of change, the translator was clearly taking wordy writing in the original and tightening it up effectively in her translation.

It is interesting to note that one element in the content category, repetition deleted, and these two elements in the readability category all serve to transform what is a very oral style of writing in the original into an acceptable written text in the translation.

Three of the four texts could be considered basically transcriptions of spoken material in English (two speeches by the senior vice-president in charge of the Information Systems department and one interview with a department executive). These three originals tended to contain a lot of material that was very obviously verbatim reporting and the translator appears to have made a deliberate effort to tidy up the lack of clarity caused by how the speakers in question spoke.

d) Structure

As in the case of the second category (style), the fourth category (structure) was also relatively minor in the case of this portion of the corpus. Five of the possible 13 elements were observed on a total of 26 occasions (or 8% of the total number of text segments coded). Most of these text segments (69.2%) concerned changes in person. As illustrated by the tables provided below, a total of 18 changes were made in the person speaking or being referred to.

Article	Frequency
VI-1-a.f	--
VI-1-c.f	--
VI-2-a.f	--
VI-2-c.f	2
Total	2

Table 109: *Inforum* — Change in person (1st to 2nd)

Article	Frequency
VI-1-a.f	7
VI-1-c.f	5
VI-2-a.f	4
VI-2-c.f	--
Total	16

Table 110: *Inforum* — Change in person (1st to 3rd)

An example of each type of change is provided. The first example is particularly interesting in that it ties in with the observations made with respect to repetition deleted, translation clearer and translation more concise. Once again, the text segment comes from an article reporting on a speech given by the department vice-president, in which the inconsistencies often noted in spoken language are observed. The translator obviously felt obliged to clean up this type of inconsistency in her translation.

Change in person (1st to 2nd) — Example

VI-2-c.e (Original): If you say that in 3, 6, 9 months *I* will be delivering x number of millions of dollars in savings and that *I* will be delivering infrastructures that will evolve so that the business will be much better, be it marketing or the actual operation of the railroad, obviously people will give you the chance.

VI-2-c.f (Translation): Si vous dites que dans trois mois, six mois ou neuf mois, *vous* aurez réalisé des économies de tant de millions de dollars et que *vous* aurez mis sur pied des infrastructures évolutives afin que l'entreprise fonctionne mieux, que ce soit au marketing ou à l'exploitation du chemin de fer, on vous donnera évidemment une chance.

The second example is of note as well. With this type of text manipulation, the translator clearly reveals that she is viewing the speech from outside the department.

Change in person (1st to 3rd) — Example

VI-1-a.e (Original): *For us, we* have to reflect those things in our own activity.

VI-1-a.f (Translation): *Les SI* doivent tenir compte de ces réalités dans leur exploitation.

The second largest number of changes in this category concerned paragraphs. Specifically, paragraphs were broken up on two occasions (both in VI-1-a.f) and paragraphs were combined on four occasions (three times in VI-1-a.f and once in VI-2-c.f). Once again, it is interesting to note that this change appears to have been concentrated in the first translation.

The final change observed in the structure category in this portion of the corpus involved changes in order. Specifically, on three occasions (once each in VI-1-a.f, VI-1-c.f, and VI-2-c.f), the translator made a change in the order of a list, as illustrated in the example provided, to place the people identified in a list in hierarchical order starting from the top, whereas in the original the hierarchical listing started from the bottom.

Change in order — Example

VI-1-CE (Original): We are all under pressure, you, me and Mr. Tellier.

VI-1.c.f (Translation): Nous sommes tous - M. Tellier, vous et moi - soumis à de fortes pressions.

When considered in combination with the addition illustrated earlier when the translator added the last name of a senior executive, this could be considered indicative of a bias on the part of the translator as to how corporate hierarchy should be dealt with.

e) Terminology

Text manipulation in the fifth and final category (terminology) was minimal. Specifically, only one of the six elements observed throughout the corpus was observed in this portion: complicated terminology. Furthermore, it was observed on only three occasions (once each in VI-1-a.f, VI-1-c.f and VI-2-c.f), accounting for less than 1% (0.92%) of the text segments coded. This is really too seldom to be considered of any significance.

Combinations of elements

The amount of data collected for this set of translations was less voluminous than that for either *Keeping Track / Au fil du rail* or *Eye on Safety / Prévenir*, yet it was high in comparison with that collected for *Rail Lines / Écho Rail*, *Le Laurentien / The Laurentian* and *À la pointe du futur / Point to the future*, given the small size of this portion of the corpus: 4 articles, five categories, 18 elements and 325 text segments. As in the case of the first five sets of translations studied, the various elements observed in this set of translations were examined in terms of the various combinations noted.

a) Hypothesis 1 - Content

The table provided on the following page summarizes the findings with respect to the content of the translations. Six of the 14 items in this category were observed in this vehicle. This table indicates that a number of changes did occur with respect to content and that some of them were observed rather uniformly throughout this portion of the

corpus. Specifically, all four of the translations in this portion of the corpus contained all four of the major elements in this category: additions, omissions, mistranslations and clarification. It is also of interest that 44% of the text segments coded (143 of 325) fall into these four groups. The remaining two elements observed (honorific added and honorific deleted) occurred with no great frequency. Yet, the fact that the four main elements were observed consistently in all four translations could, nevertheless, be indicative of a willingness on the part of the part of the translator to make changes with respect to content and this may be considered a conscious strategy on the part of the translator. In order to be able to demonstrate this more clearly, a more substantial corpus of the vehicle would be required. The table is provided on the next page.

Article	Elements Found								
	Additions	Omissions	Mis-translations	Clarification added	Change in tone (more positive or more negative)	Trans. less/more specific	Trans. weaker or stronger	Error / Correction in content	Honorific added/ deleted
VI-1-a.f	X	X	X	X					X
VI-1-c.f	X	X	X	X					X
VI-2-a.e	X	X	X	X					X
VI-2-c.f	X	X	X	X					X

Table 111: *Inform* — Elements indicative of changes in content

b) Hypothesis 2 - Style

With respect to the second hypothesis, concerning style, only one of the elements which could be considered indicative of a more neutral style (repetition deleted) was found in these translations. Likewise, only one of the six elements which could be indicative of a less neutral style (style more formal) was found in any of the translations and it occurred on only one occasions. Therefore, there would appear to be very little evidence of any conscious effort on the part of the translator responsible for this portion of the corpus to make changes in style.

c) Hypothesis 3 - Readability

The third hypothesis examined concerned the readability of the translations. When the reading indices of the translations were calculated, the two management articles scored lower reading indices in translation (although one was extremely close) and both feature articles scored higher. Nevertheless, the reading indices were not terribly high, for either the originals or the translations. Yet there would appear to be some effort on the part of the translator to make her texts more readable. Specifically, her translation was judged to be clearer than the original on 109 occasions and she specifically added material clarifying the text on 60 occasions. These two elements were, furthermore, found throughout the four translations, although to a somewhat greater degree in the first translation (VI-1-a.f).

d) Hypothesis 4 - Terminology

With respect to the fourth hypothesis concerning terminology, only one of the six elements pertaining to terminology, complicated terminology, was observed in this set of translations, and on only three occasions. Therefore, there is no evidence of significant changes made with respect to terminology.

e) Hypothesis 5 - Structure

The statistical analysis of these translations revealed that the translation stayed very close to the originals in terms of structure. Furthermore, the comparison of the translations to the originals revealed only little change structural change with the translator making no changes in terms of the agents of actions, no changes in terms of quotes, only occasional changes in person, and rare changes with respect to breaking up or combining paragraphs. None of these elements was observed with any significant frequency. Therefore, it may be concluded, that there was little structural change in these translations.

f) Hypothesis 6 - Explication

Finally, the combinations of elements were examined in order to determine whether there was an effort on the part of the translator to explicate. Three of the elements which could be indicative of an effort to explicate (translation more concise, clarification added, and translation clearer) were all noticed in all four translations. These are the three most important elements in this category. Of the elements which would

mitigate against any conclusion that the translators were explicating, only one (repetition deleted) was found in this portion of the corpus and on only ten occasions. This data would appear to indicate some efforts on the part of the translator to explicate.

Article	Elements Found							
	Correction made in content	Trans. more specific	Repetition added	Emphasis added	Trans. more concise	Agent added	Clarifi. added	Trans. clearer
VI-1-a.f					X		X	X
VI-1-c.f					X		X	X
VI-2-a.f					X		X	X
VI-2-c.f					X		X	X

Table 112: *Inforum* — Elements indicative of explication

Article	Elements Found						
	Error made in content	Trans. less specific	Trans. weaker	Repetition deleted	Emphasis deleted	Trans. wordy	Agent removed
VI-1-a.f				X			
VI-1-c.f				X			
VI-2-a.f				X			
VI-2-c.f				X			

Table 113: *Inforum* — Elements indicative of a lack of explication

CONCLUSION

As stated at the start of Part II, my goal in this research was to document what a corpus of translations can tell us about the translators who produced them, the translation processes they used, and both the general environment and the specific translating environment in which the translations were produced. The focus was specifically on observing and documenting, and not necessarily or solely on judging translation quality. Of course, it is always extremely difficult, especially in the case of translation commentary, to eliminate all assessment of translation quality and it was important to determine whether the translations were of good quality. Yet, this study intended to go beyond mere quality assessment and delve into other factors concerning the translating environment and the translating institution as well translation strategy.

My research concerned a specific group of nine translators, working for the Canadian National Railway Company, specifically for three separate but closely related departments: Linguistic Services, the head office Public Affairs department, and a regional Public Affairs department in Moncton. My corpus consisted of 69 articles and their translations (all editorials, management, and feature articles) written by a variety of professional writers (both in-house and freelance), and published in two departmental, two regional, and two company-wide newspapers/magazines intended to communicate company news, information, and policies to employees. Both translation directions (English to French and French to English) were studied, in order to be able to demonstrate whether the data applied to the translators and the translations as a whole, or

to a specific translation direction (and, as a result, a specific sub-set of the translators and translations).

My methodology involved a survey of the nine translators, the compilation of statistical data, such as the total number of words, sentences and paragraphs, the number of long and short sentences, the number of words per sentence and sentences per paragraph, and maximum sentence length (data provided in Appendix IV), the calculation of readability indices (also provided in Appendix IV) for both the original articles and the translations, and a word-by word comparison of the translations to the originals, using the Hyperresearch software.

Initially, I was looking for evidence of a translating institution, starting from hints by Bruno Bettelheim and in keeping with the premise put forward by Brian Mossop that it is the organization which pays for the translation, and not the individual translator, which determines how a translation is done. I interpreted this rather broadly to mean that a group of translators working together for the same department or organization would share certain common features and translation goals, and would produce translations with common characteristics. I had hoped to be able to establish that the organization responsible for hiring the translators and requesting translations from them was responsible for determining what kind of translations were produced.

I was also looking for evidence of translation strategy or, in other words, a consistent approach to producing translations. I wanted to look at what translations reveal about the translation strategy of both the translator and the translating institution. Although there was no *a priori* commitment to a particular translation strategy as being

more valid, or more appropriate, than another, I did use Mossop's claims about idiomatic translation and the reasons for it as a starting point for this research. I also started out with the understanding, based on my own professional experience, that few corporate or government translators, with the possible exception of Mossop, would propose anything other than the type of idiomatic translation promoted by Delisle as an acceptable norm. Yet, my desire was not to simply judge translation quality with respect to my corpus, which would in turn imply a judgement of translation strategy and transform this thesis into a commentary on good and bad translation, or good and bad translation strategy, but merely to document what the translations revealed about translation strategy. I was looking for patterns or consistencies both within the translators' words about their views and perceptions of their role and their work, and across the translation corpus, which would be in keeping with Mintzberg's concept of strategy as a pattern of behaviours which develops and emerges over time and would allow me to infer what their translation strategy was. Obviously, any determination of translation strategy has to remain at the level of inference, based on what the translators said they did as well as evidence observed in their work, since there is no way to actually get inside each translator's head and determine, with all certainty, conscious as well as unconscious strategies.

Finally, I also wanted to determine what the translation corpus could reveal about the translation environment. Specifically, I wanted to determine if the translations provided any interesting data about the linguistic situation at CN, the corporate culture at CN, attitudes with respect to employee communications, the position of the translators within the firm, and the relationship between the translators and those who were

responsible for planning and producing the various employee communication vehicles. This could be tantamount to acquiring inside information about the firm, which might not necessarily be made available to the public or observable in other ways.

Through my research I did find both patterns and consistencies which concerned the translators themselves, the translation strategies they used, the translating institution, and both the general environment and the translation environment at CN. I also had to come to terms with my own unconscious prejudices and preconceived ideas with respect to what I had expected to find and demonstrate.

Results

Consistencies and patterns were observed at both levels of this study: the translator survey and the corpus analysis.

Results of Translator Survey

Definite consistencies were observed in the translators' responses to the translator survey and also deduced from my personal knowledge of the individuals and their backgrounds and their positions within CN's Linguistic Services department and CN as whole, acquired when I worked for CN's Linguistic Services (1989-1991) and head office Public Affairs departments (1991-1993).

There was considerable variation with respect to the ages of the translators and some variation with respect to the type of degrees held by the translators (in terms of level — ranging from DEC to Master's), yet all of the translators had either received or were

in the process of receiving educations which were similar in certain respects.

Specifically, over half of the nine translators had been trained at universities in Montreal, with one in the process of being trained at the Université de Montréal, one who had trained in New Brunswick, and two who had trained abroad (in France). It is also fair to say that in a corporation where the average level of education was estimated at Grade 9, the translators in question were among the better educated employees. Moreover, all had received similar on-the-job training and support at CN. Specifically, six of these translators worked for CN's Linguistic Services department at the time they translated their portion of the corpus (those who translated *Inform*, *Le Laurentien* / *The Laurentian*, and *À la Pointe du futur* / *Point to the future*), two had worked for CN's Linguistic Services department prior to working on the portion of the corpus they translated (the freelance translator who worked on *Keeping Track* / *Au fil du rail* and the head office Public Affairs translator who worked on *Eye on Safety* / *Prévenir*), and one worked out of the Moncton regional Public Affairs department (the translator of *Rail Lines* / *Écho Rail*), in very close contact with CN's Linguistic Services department. As a result, it is accurate to say that all but one of the translators had started as junior translators in CN's Linguistic Services department and were trained by more senior translators and revisers there.

These translators also used the same language tools: dictionaries, style guides, reference materials, technical documentation, and terminology databases (specifically Termium and the BTQ, now known as le Grand dictionnaire terminologique) approved and purchased by CN's Linguistic Services department, terminology researched and approved by specialized terminologists working for that same department (and accessed through the

department's own electronic terminology database), and stylistic guidelines, lexicons, and glossaries prepared by Linguistic Services department staff.

Moreover, based on the survey, a majority of the translators shared the same view of the purpose of their employment, with two-thirds indicating that the railway translates materials in order to comply with language legislation and a majority referring to a need to respect the employees' legal language rights. Thus, they would seem to believe that they were employed primarily as a result of legal language requirements. This is in keeping with Quebec and federal language management policies and plans, as well as the applicable language legislation, all of which have relied heavily on translation for implementation. Furthermore, I believe that it could possibly account for some of the hostility I experienced while at CN from client departments requesting translation. CN was constantly downsizing during the four years I worked there (over 13,000 employees were laid off during that period) and some employees might have perceived legal language requirements as giving translators an undeserved form of protection or employment guarantee, and expressed this through criticism of their work. Of course, this perception of the translators having some sort of employment guarantee has since been proven false since all of the employees working in CN's Linguistic Services department were laid off and all language services outsourced a few years ago.

Yet, although the translators were fully aware of the legislative justification for their employment, they also stated that the company hired them to meet the employees' language needs (and not just respect legally entrenched rights). They said that they saw their role as an essential link in the communication process and defined themselves in

terms of a bridge across language barriers. It is interesting to note that, with these comments, the translators revealed that they were aware of language barriers within CN, that Canada's famous "two solitudes" were present within the firm, and that federal language legislation had in fact, as claimed by Leclerc (Leclerc 1986), maintained the separation of Canada's two major language groups and the unilingualism of those Canadians working at CN. It is also interesting to note that CN, which was Canada's first and at one time largest Crown corporation and which was governed by the *Official Languages Act*, was often criticized by the Commissioner of Official Languages for failing to fulfill its obligations both in terms of the bilingualization of its documentation and written materials, and with respect to hiring and promoting francophones.¹

¹ In fact, a past CN president, Donald Gordon, is credited with setting off a series of FLQ bombings when he publicly stated that CN would hire francophones if they could find any who were qualified. Although this is now 30 years' in the past, it was a common piece of company folklore during the time I worked at CN, generally quoted to impress newcomers with the influence CN exerted over events outside the railway, without (perhaps) an awareness of how offensive it was to francophone employees. The situation has obviously changed. There are more francophones working for the company, they do have more access to corporate documents in French, and their language rights are respected to a greater degree. However, tensions between the two language groups still exist and I was witness to an occasion which was considered offensive by the francophones working in CN's Linguistic Services Department and was specifically brought to my attention by two of them (Andrée Bachand, Manager - Terminology, and Mireille Voyer, Manager - Language Training). In 1993, as part of an effort to raise cultural awareness at CN (where fewer than 3% of the employees belonged to 'visible' minorities at the time), the Human Rights Officer (from the Employment Equity department) organized a multicultural week, to coincide with Canada's multicultural week. For that week, members of various cultural and ethnic groups were asked to set up displays to present their traditional dress and ethnic activities and provide samples of traditional meals. Some Quebecers were asked to set up a display showing Quebec culture and meals (including a sugaring off). The two employees who discussed the matter with me interpreted this quite negatively and felt that English Canadian culture was portrayed as the norm while Quebec culture was portrayed on a par with various other ethnic groups present in the country. It should also be noted that while CN now has a francophone president, Paul M. Tellier, the railway has closed the Employment Equity department and eliminated the position in the Human Resources department responsible for overseeing the implementation of the Official Languages Act during Tellier's term with the company.

Yet the translators' statements do more than testify to the presence of language barriers, they reveal that the translators viewed their role as an important one, albeit with full legal backing. Since they viewed their work as important, they were unlikely to take it lightly or perform it poorly, contrary to the criticism expressed by client departments which complained that translations somehow 'sounded like translations'.

Moreover, there were also the translators' admissions that they all correct content/factual errors, notify the authors about such errors, improve on the writer's style, and clarify or explicate the writer's thoughts. This is indicative of the importance they attached to both the quality of their work and the quality of the projects they were involved with. It also reveals a willingness on their part to make changes to the original, to manipulate content and text, based on their assessment of its quality, to go beyond merely repeating in the other language what was stated in the original language, and to provide what they perceived as a value-added product or translation. It is evidence of a sense of authority or ownership on their part with respect to their work. It also reveals their confidence in their abilities. Finally, it provides evidence of their commitment to and their desire to be part of the entire team working on employee communications projects.

A final consistency or pattern concerned the translators' complaints that they were generally brought in to work on a project after the document was already written in the source language. Obviously, despite the translators' desire to be part of the team working on communications projects, it would appear more than likely that they were excluded from that team. Despite the fact that this has been standard practice everywhere I have

worked, I still find it surprising that employee communications plans are prepared in one language with little concern for what may happen in translation. This would appear to indicate that those requesting translation services view translators as mere channellers of their thoughts and words and as having no impact of their own on the material translated. At the same time, this complaint provides further evidence as to the language barriers observed at CN. The translators were for the most part French-speaking and the writers for the most part English-speaking. Despite the fact that they worked on the same projects, there was very little contact between the two groups of employees. Those translators and writers who worked on the head office Public Affairs department publications came under the jurisdiction of the same management, since CN's Linguistic Services department reported to the Vice-President of the head office Public Affairs department. Yet, there was still little contact between the same groups either on a professional or social basis.² I have attributed this to the fact that the two groups spoke different languages, since there would appear to be little other cause for this. It is also interesting to note that the translators and writers were physically separated. For instance, CN's Public Affairs office was located at the firm's largely English-speaking head office. While CN's Linguistic Services department was officially a part of the head office Public Affairs department, it was physically separated from the department, located in a separate (but connected) building which also housed the main offices of CN's St Lawrence Region, the railway's only French-speaking component.

²

For instance, while the head office Public Affairs department Christmas party was open to all employees from the Public Affairs department, including those who worked for Linguistic Service, the Linguistic Services employees generally did not attend and always held their own Christmas party.

Finally, it would appear that the translators were perceived as providing a more last-minute secondary or support service, and their work as somehow requiring less effort and time than the original writing.

Thus, the translators surveyed shared common education and training, shared common tools, and expressed a common understanding as to the reason for their employment, their purpose as translators, the way in which they approached their work, and the constraint on their work which most concerned them. It is their very solidarity in their responses that reveals the existence of the translating institution. Their expression of their perceptions and views clearly identify them as a group. Yet, at this point in the data, although it is clear that the translators appear to belong to a translating institution, it is not at all clear whether it is CN which is the translating institution or, rather, CN's Linguistic Services department.³ At the same time, the translators' unity in terms of how they said they approach their work also hints at a translation strategy common to the group: producing a translation which is better than the original. Yet, here too, the hint needs to be corroborated by further data. Finally, their comments on their role and their complaints about the time constraints with respect to their work reveal the environment as a whole at CN to be one of separation in terms of the firm's two major language groups and the translating environment to be one where the translator is not considered a full-fledged member of the employee communications team, but rather as a subsidiary or secondary member of support staff.

³ This is an important question. CN was and still is a very large organization, although it is much smaller than in past years. In that context, it is conceivable that a department could operate fairly independently of the corporation as a whole. Also, departmental goals or objectives could conceivably be at loggerheads with corporate goals and objectives.

Results of the Corpus Analysis

The data provided by the two aspects of the corpus analysis (the statistical analysis and the comparison of the translations and the originals) were by no means of equal strength or importance.

Statistical Analysis

The statistical and readability portion of the corpus analysis provided few strong consistencies and patterns, although, on many occasions, the data seemed to hint at both consistencies and patterns which could not be corroborated by means of the research methodology adopted.

There is a very small amount of interesting data concerning the length of the translations compared to the length of the originals (depending on translation direction). It is generally accepted among translators that French translations are universally longer than English translations. I have even heard English-French translators complain that French-English translators have an unfair advantage in terms of payment and/or productivity, since English-French translators start with fewer words and produce more, while French-English translators start with more words and produce fewer. The data obtained from this corpus revealed that the French translations were frequently, but not always, longer than their English originals and that English translations were often, but once again not always, shorter than their French originals. However, this was by no means a generalized rule which applied uniformly across the corpus and it is this very

lack of generalization which could be of interest. Obviously, the criteria selected for measuring productivity and payment are always arbitrary to a certain extent. In the field of translation, the criteria commonly chosen to determine translator productivity and performance is the number of words in the source language. Given the lack of consistency in terms of the corpus studied, both translators and those who pay for translations might be interested in determining if this is still the most accurate form for such assessment.

The data also provided some disheartening information about the readability of both originals and translations. Readability was stressed as an important criteria for those writing the articles when I worked as a writer for CN's head office Public Affairs department, although there was nothing provided in writing to this effect and no comprehensive readability assessment mechanism was implemented, with the exception of the installation of Grammatik IV on certain workstations and the occasional request to writers to use it to determine readability. Yet literacy or, rather, lack of literacy was perceived as a problem at CN. At one point, the company had even set up a literacy committee to assess the situation both in terms of determining the actual literacy levels of CN employees and the measures which should be taken to improve literacy and to ensure that the readability level of company information and training materials was appropriate. Although it is interesting to note that while the committee members did include representatives of the Linguistic Services department, there was no one from the head office Public Affairs department on it. In any event, I had thought to be able to prove that customer complaints about translations 'sounding like translations' could be linked to

readability. This was the first of my prejudices to become obvious to me. In an ideal situation, the translators would be aware of literacy problems at CN and would make a concerted effort to improve on readability. In a worst case scenario, the translators, who are among the company's better educated employees, would produce texts which were harder to read, using terminology that was perhaps too refined or too complicated for the employees. When I worked in CN's Linguistic Services department, the general perception was that it was easier to translate towards English (and as a result those working towards English had higher daily quotas) because English terminology was more flexible and not overseen either by in-house terminologists or by an agency such as the Office de la langue française. I felt that the English translations in my corpus would be consistently easier to read than the French originals and that the French translations, given a more rigid focus on using certifiably correct terminology, would be consistently harder. Yet readability was extremely inconsistent across the entire corpus and within each portion of the corpus. To start with, neither originals nor translations could be considered highly readable for a target audience with a relatively low level of education. Furthermore, no individual newspaper or magazine could be considered more readable than another. Finally, no individual translator or pair of translators could be considered as producing translations which were either more readable or less readable than the originals. There were occasionally hints that all of the translators were attempting to improve on readability. Yet, the data was inconclusive. Since the data for the originals is as varied as that for the translations, I do not believe that a larger corpus would serve to provide more consistent data. This particular hypothesis could only be demonstrated

more fully with a corpus in which the originals had consistently high or low readability indices since that would serve as a point of comparison for the translations.

Finally, the data did provide some interesting insights into the translation unit used by the translators studied. Namely, the closeness in the number of sentences and paragraphs between the translations and the originals revealed a great deal of respect on the part of the translators for the formal structure of the original text. This finding could be an indication that the translator is either translating one sentence or at most one paragraph at a time.

Therefore, although the statistics and readability data could be considered of interest, and occasionally hinted at either translation strategy (as in improving readability) or translation process (as in translating one sentence or paragraph at a time), this portion of the corpus analysis provided nothing which could be considered truly significant with respect to translating institution, translation strategy or translation environment.

Comparison of Translations and Originals

The bulk of the data obtained resulted from the word by word comparison of the translations and the originals and it is this data which provided the most insight into translator profile, translating institution, translation strategy, and translation environment.

The most obvious finding, evident in all six vehicles in the corpus, concerns the volume of data obtained through the comparison of translations to the originals. The corpus as a whole was not excessively large: six magazines/newspapers and a total of 69 articles were studied, representing the work of nine translators. Yet, despite the relatively

manageable size of the corpus and the small number of translators involved, the data obtained was very voluminous. A total of 52 separate elements were observed (see Appendix V for a list of the elements and Appendix VI for examples) which in itself is not enormous. Yet, a total of 2,892 text segments were coded for these 52 elements, which is considerable. This would appear to reveal a certain willingness on the part of all of the translators to manipulate text or, in other words, to make changes they considered appropriate. It could also be indicative of a certain deliberateness or strategy on the part of the translator. Namely, an isolated occurrence of any element could be considered mistakes or lapses on the part of the translator, but over 2,000 occurrences of over 50 elements cannot be considered accidental. This is further confirmed by the fact that in the case of at least three of the vehicles, *Keeping Track / Au Fil du Rail*, *Le Laurentien / The Laurentian* and *À la Pointe du Futur / Point to the Future*, more than one person was involved in the translation process. Specifically, with respect to *Keeping Track / Au Fil du Rail*, the freelance translator responsible for the translations worked closely with the woman responsible for the production of the French version of the newspaper and presumably, they agreed on the translation choices made. At the same time, the newspaper went through several proofreadings: by the person responsible for the French newspaper, by a member of the department's support staff, and by the in-house translator working for CN's head office Public Affairs department. If the elements observed during the word-by-word analysis of this portion of the corpus had been considered flaws or errors, certainly one of these individuals would have raised the issue. The situation was similar in the case of the English translations of *Le Laurentien / The Laurentian* and *À la*

Point du Futur / Point to the Future. The two French-to-English translators worked as a team, with one translating and the other revising. It is impossible to determine which one did which translations as the two translators often switched roles. Once again, it is obvious that, if the changes made by this pair had been considered incorrect or unacceptable, the person revising the translation would have raised the issue.

The sheer volume of this data would also appear to indicate that the translators felt that there was something wrong with the originals that needed to be corrected or something of poor quality which required improving. This is in keeping with statements made at the time of the survey to the effect that they would correct any content or factual errors they observed. As an extension, it could also be indicative of a willingness to improve on the original, to produce a translation better than the original.

Yet, still in terms of volume, neither the elements observed nor the text segments identified were spread evenly across the corpus. Specifically, a much larger variety of elements was observed in the *Keeping Track / Au fil du rail* translations (90.47% of the 52 elements observed were found in this vehicle), with both *Eye on Safety / Prévenir* and *Rail Lines / Écho Rail* containing over 50% of the total number of elements observed and the remaining three vehicles, *Le Laurentien / The Laurentian*, *À la Pointe du futur / Point to the future* and *Inforum* all containing fewer than 50% of the total elements observed (40.4%, 46.2% and 34.6%, respectively).

It was more difficult to compare the number of translation segments coded for each vehicle, given the variety in the number of articles contained in each portion of the corpus, as well as variations in the lengths of the articles. For example, although more

translation segments were coded for *Keeping Track / Au fil du rail* (1,099 of the total of 2,892), that portion of the corpus also contained more articles than any of the others. For this reason, the average number of translation segments coded per article was calculated: 61 translation segments per article for *Keeping Track / Au fil du rail*, 74 per article for *Eye on Safety / Prévenir*, 34 per article for *Rail Lines / Écho Rail*, 30.6 per article for *Le Laurentien / The Laurentian*, 24 per article for *À la Pointe du futur / Point to the future*, and 81 per article for *Inforum*.

This reveals two facts of interest. First, all of the translators were more than willing to make changes to the text, or manipulate the text. This corroborates the statements they made in the translator survey.

Second, there is a clear split within the corpus, with three sets of translations (those produced by the freelance and in-house translators working directly for CN's head office Public Affairs department and the English/French Linguistic Services department translator) averaging far more translation segments coded per article than the three others (the two sets of translations produced by the Linguistic Services department French-English translators and the translations produced by the regional Public Affairs department translator). I had expected to see a split, but not quite the one I did see, once again revealing my prejudices based on my knowledge of the situation and the people at CN. Specifically, I had expected to see more text manipulation in the case of one vehicle: *À la Pointe du futur / Point to the future*. This was one of the two vehicles in the corpus not written by professionally trained writers; *À la Pointe du futur / Point to the future* was written by an electrician. In the case of this vehicle, the two French-English translators

frequently complained about the poor quality of the writing. As a result, I had expected to find them making more changes than some of the other translators. At the same time, I had expected to see fewer changes in the case of *Inforum*. This was the second of the two vehicles not written by a professionally trained writer; it was, in fact, written by a computer technician who had been promoted and put in charge of employee communications within CN's Information Services department. In this case, the person producing the newsletter was often quite vocal in my presence about the need to supervise the translator in order to make sure that the translation respected the original. As a result, I had expected a very close translation and found more changes per article than I expected in this very small portion of the corpus. The word-by-word corpus analysis corroborated the amount of change made by this translator and revealed that she was taking what could well be considered verbatim transcripts of speeches and interviews presented as articles and producing much more polished written reports in French.

Several other significant findings concern the types of elements found, or not found as the case may be, once again in terms of both translation strategy and translation environment.

First, only two of the 52 elements observed in the corpus could be considered indicative of unidiomatic or ungrammatical translation. Furthermore, these elements occurred relatively infrequently throughout the entire corpus. Specifically, three of the magazines/newspapers (*Eye on Safety / Prévenir*, *Le Laurentien / The Laurentian*, and *Inforum*) contained neither of these elements, two contained only one of the two elements (*Keeping Track / Au fil du rail* and *Rail Lines / Écho Rail*), with only seven occurrences,

and one (*À la Pointe du futur / Point to the future*) contained both elements, for a total of 20 occurrences. This accounts for only 3.8% of the elements observed and less than 1% of the translation segments coded. As a result, even though I had no intention of judging the quality of the translations studied, it is clear that the translators were highly trained, highly skilled professionals who produced excellent translations, with translation quality remaining consistently high across the entire corpus. It would also appear that one of their goals, or strategies, was to produce translations which read both grammatically and idiomatically. The very lack of any evidence to the contrary supports what Mossop refers to as idiomatic translation and what Delisle promotes as correct translation in his writings as a translation strategy preferred by this group of translators. Yet, the fact that they did occasionally make grammar mistakes demonstrates that despite their preferred strategy, translators are not perfect. These rare errors could also be a result of hurried work, corroborating their complaints that they are not given sufficient time for their work.

Second, the type of elements coded also supports the conclusion drawn from the volume of the data, to the effect that this group was more than willing to manipulate text or, to be more specific, to make changes to the content of the material translated. Based on the data obtained, in five out of the six sets of translations, most of the translation segments coded fell into the content category: *Keeping Track / Au fil du rail* (63.6%), *Eye on Safety / Prévenir* (68.6%), *Rail Lines / Écho Rail* (66.8%), *Le Laurentien / The Laurentian* (62.3%), and *À la Pointe du futur / Point to the Future* (58.5%). In the only vehicle for which this was not the case, *Inforum*, the content category was still the largest (44%). In their response to the survey, all of the translators had said that they would

correct content and factual errors found in the original and they all implied that they would improve on the original when they considered it necessary. Yet, as observed in the word-by-word analysis of the corpus, their apparent willingness to change content by adding, removing or even totally changing what was stated in the original goes a step beyond this stated strategy. These translators choose to both add and omit material which they deemed either important or insignificant. Content was equally affected by what was designated as mistranslations. Although mistranslations could, perhaps, be interpreted as a certain lack of competence or lack of skill on the part of the translator, the sheer number of the mistranslations mitigates against this and the mistranslations should perhaps be interpreted as deliberate changes made by the translator. In retrospect, they should even perhaps have been identified as ‘changes’, rather than mistranslations. There were two vehicles in the corpus in which the total number of mistranslations could be considered significant, *À la pointe du futur / Point to the Future* and *Le Laurentien / The Laurentian*, both of which were translated from French to English. These mistranslations were startling in the sense that any translation produced by one member of the pair was automatically revised by the other translator. If they are to be considered true mistranslations (in the sense of translation errors), they could be evidence of shoddy or hurried work on the part of this pair. These two translators were always extremely vocal in my presence about the lack of time allowed them for their work. The senior French-English translator mentioned this in her responses to the survey. Yet, contradictory as this may seem, she also mentioned that, in the case of *Le Laurentien / The Laurentian*, she was brought into the project at the planning stage, which made her work on the

vehicle more interesting. Perhaps the mistranslations made in the translation of that vehicle indicate a very different reality. Yet, if they are to be considered changes, then they are evidence of a deliberate desire to make changes, since both of the translators had to agree with respect to the mistranslations made. Both of these same two translators also complained frequently in my presence about the poor quality of the *À la pointe du futur / Point to the Future* original articles and the changes they made could be indicative of a desire to improve on quality.

In any event, this evidence of the translators' willingness to manipulate content, obvious through the number of additions, omissions and mistranslations or changes made, is further supported by other changes, particularly those affecting the tone (either more positive or more negative), the strength (translation either stronger or weaker) and the addition or omission of emphasis, as well as through the various factual corrections the translators made.

Third, the types of elements coded support the evidence obtained through both the translator survey and the number of elements coded to the effect that another primary translation strategy of these particular translators could be described as producing a translation which is better than the original. This claim is supported by the number of instances on which clarifications were added, corrections made, jargon removed, terminology simplified, and evidence of attempts to explicate or make the translation easier to read, as well as the number of instances on which the translation was considered clearer than the original. All of the translations in all of the vehicles contained text segments coded as either translation clearer or clarification added. In many cases these

translators would appear to be stating information outright in their translations which had only been implied in the original or removing doubt when they perceived it. This could also be considered evidence of a greater degree of honesty or openness to communication on the part of the translators as when they translated text portions which are filled with bureaucratic jargon and meaningless words and phrases into easily comprehensible text or when they removed obfuscation, and called a spade a spade so to speak, specifically when referring to job cuts and line abandonments, both of which management might want to hide behind words and yet which are a prime concern of employees. This strategy of providing a translation which is better than the original is also supported by the number of instances on which the translators added nonsexist usage when gender neutral or gender inclusive language should also have been used in the original.

Fourth, the type of elements coded also reveal translation process, as hinted at during the statistical analysis of the originals and their translations. Specifically, there were few changes made with respect to structure, in terms of the formal sentence and paragraph structure of the texts. This tends to corroborate the data obtained through the statistical analysis of the corpus, to the effect that the translation unit is either the sentence or the paragraph.

Finally, no consistent patterns were observed in the data obtained in the word-by-word comparison of the translations with respect to either style or terminology. Changes in both were observed. On occasions the style of the translated text was more formal, on other occasions it was less formal. Likewise, on occasions less complicated terminology was used, while on others more complicated terminology was used. Furthermore, the

elements coded in these two categories were not numerous. As a result, no conclusions can be drawn.

Discussion of Results

To summarize, the translator survey revealed the importance the translators attached to the quality of their work and their desire to provide “value-added” translations. It hinted at the existence of a translating institution, by which I simply mean that instead of acting as individuals the translators were part of a cohesive group which set translation quality standards and determined the kind of translations produced, while creating some doubt as to which entity made up that translating institution: CN or CN’s Linguistic Services department.⁴ It provided evidence of the translators’ awareness of the existence of language barriers within CN. It also revealed the willingness of the translators to manipulate text and content as well as their sense of ownership over their work and the authority they exercised with respect to their work. Moreover, it made it clear that despite the translators’ desire to be full-fledged members of the employee communications team, they are generally brought into projects at the last minute. This

⁴ Yet a third possibility for the translating institution could be a sort of ‘translators’ guild’ and it would be very interesting to study this possibility in further depth. With the expression ‘translators’ guild’, I am referring to the fact that most translators working in Canada have trained at the same universities. Translators in Quebec are also brought together through the *Ordre des traducteurs et interprètes agréés du Québec* (OTIAQ). The OTIAQ is still a rather recent organization, which grew out of the *Corporation professionnelle des traducteurs et interprètes du Québec* which in turn evolved from the *Société des traducteurs du Québec*, and does not enjoy the authority of organizations such as the engineers’ order or the *Barreau du Québec* with respect to controlling the professional behaviour and work ethics of its members, it is still an order in Quebec, with all the powers and responsibilities usually attributed to orders under Quebec legislation, and could potentially become a very strong force in determining how translation is done and how translation quality is judged. The data obtained through this research cannot be generalized to apply to all translators working in Quebec. It would, however, be very interesting to look at similar corpora produced by similar groups of translators to see if this would be possible and would therefore, indicate a broader translating institution.

further reveals the ignorance of the client departments with respect to the amount of time required for translation and further shows that they view translators as channellers for the thoughts and words of the writer, while having no impact on the material produced. The compilation of the statistics and the calculation of the readability indices provided little concrete data of interest, with the exception of information about what might be termed the translation unit of this group of translators. Namely, the translators would appear to be translating one sentence or, at most, one paragraph at a time. The corpus analysis provided evidence that the translations were generally of very high quality, with a very few rare mistakes that may confirm both that the translators may be pressed for time, as they complained of in the survey, and that translators are not infallible. The data obtained revealed a certain willingness to make changes in content. It also demonstrated a deliberateness on the part of the translators. Namely the changes they made cannot be considered haphazard or random but must be considered part of a strategy. Furthermore, two complementary strategies became obvious: producing translations which are both grammatical and idiomatic and producing translations which are better than the original. The desire they expressed in the survey to produce value-added translations was corroborated by the corpus analysis, which also proved that they succeeded in producing value-added translations. As for the translators, the data reveals that they have a certain confidence in their language/translation skills, perhaps even a sense of superiority with respect to the writers (as shown by their willingness to change and correct). They also would appear to be more open and honest at times in the manner in which they present the information communicated. Finally, the corpus analysis also corroborated the

statistical analysis in terms of translation unit. All of these results combined to surprise me, confirm some of what I had suspected, and reveal a great deal about the situation of translators and translation at CN.

To start with, the high quality of all of the translations combined with the evidence that the translators both intended and strove to produce high quality, grammatical and idiomatic translations that were in many respects superior to the originals reveal a value-added side to translation I had not considered, particularly given the attitudes of suspicion on the part of the client departments and the time constraints imposed on the translators. Specifically, despite my familiarity with the translators in question, as well as my knowledge of and confidence in their abilities and skills, I had expected some evidence of poor translation, resulting most likely from the time constraints they worked under. Yet, the translators did not merely produce correct translations, they went to great effort to provide superior translations, correcting errors they noted in the original, adding material they considered pertinent, removing material they deemed irrelevant, and clarifying what they viewed as unclear. Moreover, they saw this as part of their job. As a result, I understand the clients' criticism even less than when I undertook this research. It cannot stem from a lack of translation quality and there must be another source for it.

There are several possible sources for this resentment on the part of the translation client. One hypothesis, as mentioned briefly at the start of this chapter, is the perceived employment guarantee supposedly enjoyed by the translators in question, given the legislative requirement for translation. In a situation in which 25% of employees were

likely to lose their jobs, certain employees may have chosen to denigrate the work of others they perceived as having an undeserved advantage in order to promote themselves. From personal experience, I know that office politics at CN during the downsizing period were rather intense. Yet, while this could apply to the case at CN, there is no way to corroborate it. Furthermore, I encountered the same difficulties in the translator/client relationship while working at CP, at a time when downsizing was not a factor. Another possibility is the language barriers at CN. Specifically, unilinguals might resent having to resort to translation in order to communicate with employees on the other side of the barrier. At the same time, this resentment could well stem out of a problem of ownership. The writer obviously experiences a sense of ownership with respect to his/her texts. Yet, based on the manner in which they manipulated the text, namely the changes they made, the translators also experienced a very strong sense of ownership with respect to the texts. The writer might perceive the translators' appropriation of the texts as somehow usurping their own ownership.

Second, there is the matter of the translation unit. The findings revealed a great deal of respect on the translators' part for the number of sentences or paragraphs in the original, which would appear to indicate that the translation unit is either the sentence or the paragraph. Although I was initially surprised by this finding, after more detailed consideration of my own work habits as a professional translator, I realized that I should not have been. This translation unit could well be a result of current translation work practices. Gone are the days when translators produced either handwritten translations or typewritten translations and then submitted them to secretarial support staff for typing and

page layout. Gone are the secretaries, in fact. Translators are now solely responsible for the entire translation product, typing, printing and layout included. All translation is done directly on screen. Furthermore, in many cases, translators now receive the originals in electronic format, with all page layout and formatting provided, and simply type their translations in over the original. Much text revision is now done directly on screen as well. The constant pressures in the business environment to both downsize and increase productivity affect translators as much as any other type of employee. Current translation work procedures are one way of both eliminating staff (in the case at hand, support staff) increasing productivity (reducing data entry, formatting and proofreading time). Yet, these same procedures would appear to make it less likely for translators to move text around. It is difficult for an individual to deal with more than a few sentences or more than a paragraph at a time. Furthermore, in a setting which stresses productivity gains, the translator, like any other employee, will choose the easiest way in which to increase the number of words translated and it is most likely easier to translate and type in one sentence at a time. Unfortunately, the data obtained does not prove this hypothesis conclusively. Another corpus is needed. The number of sentences and paragraphs would have to be compiled. Individual observation of several translators working on screen, perhaps with videotaping of data entry, would also be of considerable use — but likely quite tedious. It would also be interesting to map a translation corpus, comparing exactly where each piece of information is positioned in both the original and the translation, to either corroborate or refute the hypothesis of the sentence or paragraph as the translation unit.

Third, there is the willingness of the translators to manipulate content. This is revealing in several respects. I initially found this lack of inhibition on the part of the translator most surprising, which is, in turn, revealing as to my own prejudice or bias regarding the situation of the translators at CN. The hierarchical structure of CN as a whole and of CN's Linguistic Services department was very rigid. Most in-house corporate translation departments have similar structures, as do the federal government translation departments. Although English-French and French-English translators were basically treated in the same manner, hierarchically speaking, French-English translators have generally been perceived as having slightly more liberty, mainly because there was usually only one translator, and only very occasionally two, working towards English in any given department. This was the case when I worked in CN's Linguistic Services department. I was the only in-house French-English translator at the time and the department generally viewed me as having more independence than the other translators since I was not accountable to a revisor and was slightly outside the hierarchical loop, so to speak. I concurred fully with this perception and I felt that I was able to take more liberties with my translations and make the work more fully mine than the English-French translators could because there was no one in the department qualified to either judge or modify my work. When I undertook the word-by-word corpus analysis, I had fully expected to see the rigidity of the hierarchy reflected in rigid translations. In fact, I had fully expected to be able to document the customer complaints I referred to earlier with respect to translations sounding like translations, in the case of the French translations, and I had also expected to be able to demonstrate that the two French-English translators

took more liberties with their translations than the others. I was somewhat astounded by the fact that all of the translators took liberties with content.

This lack of inhibitions on the part of the translators, in terms of content (which could, perhaps, be referred to as a “contentual” lack of inhibition), reveals several aspects of the attitudes of this group of translators. Specifically, as mentioned earlier, they demonstrated a strong degree of confidence in their language, translation and communication abilities. They also expressed an obvious sense of ownership with respect to their texts, in the sense that they felt justified in determining content. Furthermore, they do not appear to view themselves as channellers, merely transmitting the thought and meaning of the writer, but as having both the independence and the authority to determine what content should be. Specifically, rather than agreeing to serve as an invisible agent dependent on the writer’s intent or desires, the translators also obviously viewed themselves as an integral part of the communication process and, at times, even perceived their knowledge, language skills and understanding of the communication needs of their audience as superior. This is all the more interesting given the fact that only one of the translators surveyed said that she was brought into the process prior to the translation phase, and only in the case of one vehicle (*Le Laurentien* / *The Laurentian*) and that all of the others felt that they were brought into the process at the last minute. Yet, despite the fact that they were not involved with the groups responsible for determining the message to be presented through the articles in question, they did nevertheless transmit the message they personally thought should be transmitted. It is also interesting to note that, once again despite the rigid hierarchy of the department,

which was also reflected throughout the entire corporation, the translators felt they had authority over their own work and actually exercised that authority.

This ‘contentual’ lack of inhibitions on the part of the translators is also revealing as to their status and position within the company. Obviously, they got away with making the content changes they made. They not only felt and exercised authority over content, but no one either could or would take that authority away from them.

Several scenarios are possible: the translators were held in high esteem by the people they worked for; CN was a very unilingual English-speaking company where francophones made up a small minority and bilingual anglophones were rare, and the clients had to trust the translators to do good work because they had no way of checking on them; or there was so little contact between those writing and those translating (either as a result of language differences or a lack of interest) that the writers were not aware of the content changes made by the translators.

Based on my experience at CN, there is an element of truth in all of these scenarios. Specifically, despite the expressed lack of trust in the firm’s translators which initially prompted me to undertake this research, and which was even expressed in the articles included in the corpus (see “Change in tone (more positive) —Example 2”, page 203), certain translators were held in very high esteem. This applies specifically to the translator responsible for *Eye on Safety / Prévenir*. She holds a B.A. in translation and worked for CN’s Linguistic Services department for several years before transferring to the firm’s head office Public Affairs department, where she is still responsible for all materials made available to the railway’s internal and external audiences in French. Since

the outsourcing of CN's translation work she has also been responsible for overseeing the multi-million word contract for the railway's translation services. She is, in fact, the only translator involved in the translation of my research corpus who is still employed by CN and, as far as I know, the only translator now employed by the firm. Obviously, based on a certain confidence in her translation abilities, CN has placed her in a position of trust, in terms of translation quality. In a similar manner, when the railway's Linguistic Services department was closed and the company's translation needs outsourced, several of the translators who were laid off formed their own company and won the contract for fulfilling CN's translation needs. Obviously, the quality of the work done by these translators is accepted.

Likewise, it is also true that many CN employees were unilingual and they simply had to count on the translators to do their work properly since they were unable to verify translation quality. This is in keeping with the language barriers observed through the translators' response to the survey. The two language groups do not seem to mingle and the translators serve as a bridge across this barrier, yet neither party on either side of the barrier can necessarily determine if they are serving as a poor, adequate, or superior bridge. The most striking example of this is found in the translations of *Rail Lines / Écho Rail*. The writer responsible for that vehicle was a freelance writer, who reported directly to the regional vice-president. All of her articles received final approval from the regional vice-president. They contained numerous instances of very bureaucratic, highly jargonized language. For instance, job cuts were seldom referred to that directly; expressions such as "adjustments" were preferred. Given the vice-president's approval of

the material, he also had to approve this type of obscure terminology, most of which the translator made much clearer (see “Translation clearer — Example”, on page 233). I presume that this was done without the knowledge of the regional vice-president, a unilingual anglophone.

Furthermore, there was generally very little contact between the writers and translators, either individually or as groups. This is particularly obvious in the case of the errors which the translators corrected and which were not in turn corrected in the originals. Either the translator did not communicate the corrections to the writer or the writer ignored the translator, since the corrections were not made in the originals.

It would be interesting to obtain further data to support or eliminate any or all of these scenarios concerning the translators’ status and position within the firm, as indicated by their willingness to make changes in content and the authority they exercise while doing so, possibly in the form of a survey of those using their services, management, and the writers.

Fourth, there is the matter of the translating institution. Mossop believes that the organization paying for translation, and not the individual translator, determines translation strategy. (Mossop 1990; Mossop undated) The translators’ consistency and uniformity in their responses to the translator survey provided clear evidence of that institution. Yet, I do not believe that CN can be identified as the translating institution.

The fact that the translators’ were so obviously working independently, being brought into projects at the last minute, improving on texts without those improvements being reflected in the source language texts, and making corrections which were, in turn,

not made to the source language texts would appear to indicate that the CN's Linguistic Services department is, in fact, the translating institution, determining translation standards and strategies. Although some might consider this to be one and the same thing, namely it is irrelevant whether it is CN or CN's Linguistic Services department, I believe that the distinction is an important one. Specifically, since, as described above, the translators are working independently, this would seem to imply that it is the translating department rather than the translating institution which is determining strategy. This is not problematic in the sense that the translators were producing a very high quality product. It could be problematic if their translation strategy is not what the corporation or management would want. Specifically, just as the corpus analysis demonstrated that the translators' translation actions and choices were deliberate, it must be assumed that the writers' writing and choices were every bit as deliberate. In this case, when a writer refers to "corporate adjustments" and not "job cuts", it would have to be considered deliberate. Perhaps this is where the difficulties in the relationships between the client departments and the translators stem from: different points of view in terms of communication strategy, as reflected in the translators' translation strategies.

Furthermore, the translators' strategy of producing translations which were better than the originals and their clarification of the text, especially in terms of the removal of obscure or unclear language which might have been deliberately unclear or vague raise also certain problems with respect to who the translator's client is and who the translators perceive as their clients. It is obvious that for those writing and producing employee communication vehicles, their target audience is the employees, while their client is the

individuals or groups who plan the messages to be communicated to the employees. As a logical extension, the translators' target audience should also be the employees and their client should also be the individuals or groups planning the messages to be communicated. Yet, I believe that the data reveals a certain confusion on the part of the translators as to exactly who their client is. Once again, their translations appear to be more open, more honest, and more communicative at times — at least from the employees' point of view — than their true client might want. And, as stated, this could well be the source of the perceived criticism on the part of their actual clients.

There is a further possible problem with the liberties taken by the translators and the authority they exercised precisely as a result of the fact that they were not part of the groups responsible for employee communications and for determining the message to be transmitted to the employees and they could well have been working at loggerheads with respect to employee communication strategy.

Obviously as a result of these two very possible and potentially quite serious problems, some change is required in the translation process — at least at CN— and this study was initially contemplated with the goal of identifying such changes. The translators who work on employee communications should be involved with the group that determines what the message is to be since they have such an impact on what the message is. The fact that they are not involved in the process reveals a belief on the part of the client that the translator is merely a channeller and has no impact on the translation—which in the light of the data obtained in this study is rather naive. Yet, I do not want to imply that the translator necessarily has a bad impact. In the case of the corpus

analyzed, the translator had a very beneficial effect, particularly in terms of the translator's perceived audience/client — the employees.

There should also be much more communication/contact between those doing the writing and those doing the translation so that improvements are not made solely in the translated language — one possible outcome of this is that translators should have more training as writers and instead of translators being set apart in a separate translation department, they should be working more closely with writers, possibly in writer/translator teams/pairs.

Finally, there has to be a very clear indication as to who the translator's client actually is.

Summing Up

The major contribution of this study is the systematic portrait it provides of both translators and translation. It reveals that translators are not invisible and that their translation strategies can be inferred from an examination of their work. It also reveals that their translation strategies can have an impact on the message communicated. It demonstrates the existence of the translating institution, but raises questions as to which entity should actually be considered the translating institution, the corporation or the department employing the translator. Furthermore, it indicates that translations can provide interesting insight into the corporate and linguistic dynamics of the translation environment. Finally, it has provided an interesting glimpse of the translation process itself.

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APPENDIX I

List of Articles Analyzed

I. KEEPING TRACK/AU FIL DU RAIL

Distribution: Company-wide plus pensioners

- 1. Issue: Vol. 29, No. 1 -- January/February 1994**
 - a. Type I Article: Management column
President's column
Title: Changing for the better / Changer pour le mieux
Page(s): 3
Codes: I-1-a.E / I-1-a.F
 - b. Type II Article: Editorial
No editorial in this issue.
Codes: I-1-b.E / I-1-b.F
 - c. Type III Article: Main article
Title: Out to win / Faire ce qu'il faut pour gagner
Page(s): 6-7
Codes: I-1-c.E / I-1-c.F

- 2. Issue: Vol. 29, No. 2 -- March 1994**
 - a. Type I Article: Management column
President's column
Title: Linking individual performance to corporate objectives / Rendement individuel et objectifs d'entreprise : des éléments indissociables
Page(s): 3
Codes: I-2-a.E / I-2-a.F
 - b. Type II Article: Editorial
No editorial in this issue.
Codes: I-2-b.E / I-2-b.F
 - c. Type III Article: Main article
Title: Grand Trunk & Santa Fe Team with General Motors to serve the North American Auto Buyer / Collaboration et qualité totale au service de l'industrie automobile
Page(s): 6-7
Codes: I-2-c.E / I-2-c.F

3. Issue: Vol. 29, No. 3 -- April 1994

- a. Type I Article: Management column
President's column
Title: Going beyond the classroom / La formation continue : un gage de réussite
Page(s): 3
Codes: I-3-a.E / I-3-a.F
- b. Type II Article: Editorial
No editorial in this issue.
Codes: I-3-b.E / I-3-b.F
- c. Type III Article: Main article
Title: Tellier reviews progress to date / La situation des femmes au CN : où en sommes-nous ?
Page(s): 7
Codes: I-3-c.E / I-3-c.F

4. Issue: Vol. 29, No. 4 -- May 1994

- a. Type I Article: Management column
President's column
Title: Safety rules / La sécurité passe avant tout...
Page(s): 3
Codes: I-4-a.E / I-4-a.F
- b. Type II Article: Editorial
No editorial in this issue.
Codes: I-4-b.E / I-4-b.F
- c. Type III Article: Main article
Title: It's not by chance we're one of the safest / Nos efforts ont porté fruit
Page(s): 1 & 3
Codes: I-4-c.E / I-4-c.F

5. Issue: Vol. 29, No. 5 -- June 1994

- a. Type I Article: Management column
President's column
Title: Intermodal partnerships with carriers and employees / Transporteurs et personnel : une question de partenariat
Page(s): 3
Codes: I-5-a.E / I-5-a.F
- b. Type II Article: Editorial
No editorial in this issue.
Codes: I-5-b.E / I-5-b.F

- c. Type III Article: Main article
Title: Sometimes competitors are customers / Nos concurrents sont parfois nos clients
Page(s): 5
Codes: I-5-c.E / I-5-c.F

- 6. **Issue: Vol. 29, No. 6 -- July/August 1994**
 - a. Type I Article: Management column
President's column
Title: Our strategy is on target / Notre stratégie porte fruit
Page(s): 3
Codes: I-6-a.E / I-6-a.F
 - b. Type II Article: Editorial
No editorial in this issue.
Codes: I-6-b.E / I-6-b.F
 - c. Type III Article: Main article
Title: Process improvement: from philosophy to practice / Amélioration de nos façons de faire
Page(s): 1 & 3
Codes: I-6-c.E / I-6-c.F

- 7. **Issue: Vol. 29, No. 7 -- September 1994**
 - a. Type I Article: Management column
President's column
Title: Above and beyond / Un peu plus haut, un peu plus loin
Page(s): 3
Codes: I-7-a.E / I-7-a.F
 - b. Type II Article: Editorial
No editorial in this issue.
Codes: I-7-b.E / I-7-b.F
 - c. Type III Article: Main article
Title: The Auburn Terminal -- catching the wave of the future / Un nouveau terminal intermodal ouvrira ses portes à Auburn
Page(s): 1 & 3
Codes: I-7-c.E / I-7-c.F

- 8. **Issue: Vol. 29, No. 8 -- October 1994**
 - a. Type I Article: Management column
President's column
Title: Speaking of results / En parlant de résultats...
Page(s): 3
Codes: I-8-a.E / I-8-a.F

- b. Type II Article: Editorial
No editorial in this issue.
Codes: I-8-b.E / I-8-b.F
 - c. Type III Article: Main Article
Title: Sharing the fruits of our labor / Un même effort, une même réussite
Page(s): 1
Codes: I-8-c.E / I-8-c.F
- 9. Issue: Vol. 29, No. 9 – November/December 1994**
- a. Type I Article: Management column
President's column
Title: Ending the year in high style / Une année qui se termine en beauté
Page(s): 3
Codes: I-9-a.E / I-9-a.F
 - b. Type II Article: Editorial
No editorial in this issue
Codes: I-9-b.E / I-9-b.F
 - c. Type II Article: Main article
Title: The little locomotive that could / Du bout des doigts...
Page(s): 3
Codes: I-9-c.E / I-9-c.F

II. EYE ON SAFETY / PRÉVENIR

Distribution: All employees

- 1. Issue: Vol. 3, No. 1 – April 1993**
- a. Type I Article: Management column
No management column in this issue.
Codes: II-1-a.E / II-1-a.F
 - b. Type II Article: Editorial
Title: Emotional video shows how to stay alive on the job / La communication par l'émotion
Page(s): 3
Codes: II-1-b.E / II-1-b.F
 - c. Type III Article: Main article
Title: Safety is good business / La sécurité est rentable
Page(s): 4
Codes: II-1-c.E / II-1-c.F

2. Issue: Vol. 3, No. 2 -- June 1994

- a. Type I Article: Management column
No management column in this issue
Codes: II-2-a.E / II-2-a.F
- b. Type II Article: Editorial
Title: Risk being late or being "the late"? / Risquer d'être en retard ou de ne plus <<être>>
Page(s): 3
Codes: II-2-b.E / II-2-b.F
- c. Type III Article: Main article
Series of articles on training
Titles: Extensive training fuels CN's safe operations / Formation et sécurité : l'une ne va pas sans l'autre... -- Locomotive engineers get real taste for safe operations / Les mécaniciens de locomotive sur... la voie de la sécurité -- Safety: a strategic value at CN / La sécurité est une valeur stratégique -- Entire Operations Training curriculum stresses safety / Au menu de la Formation exploitation : cours actualisés, vidéos et briefings... enrobés de sécurité
Page(s): 4 - 5 - 6
Codes: II-2-c.E / II-2-c.F

3. Issue: Vol. 3, No. 3 -- October 1993

- a. Type I Article: Management column
No management column in this issue.
Codes: II-3-a.E / II-3-a.F
- b. Type II Article: Editorial
No editorial in this issue
Codes: II-3-b.E / II-3-b.F
- c. Type III Article: Main article
Feature on Nakina derailment
Title: The Nakina Derailment / Le déraillement de Nakina
Page(s): 8 - 9 - 10 - 11 - 12
Codes: II-3-c.E / II-3-c.F

4. Issue: Vol. 3, No. 4 -- December 1993

- a. Type I Article: Management column
No management column in this issue
Codes: II-4-a.E / II-4-a.F
- b. Type II Article: Editorial
Title: At home, at work, at play -- safety starts with us / La sécurité, c'est l'affaire de tous!
Page(s): 3
Codes: II-4-b.E / II-4-b.F

- c. Type III Article: Feature (series of articles)
 Titles: "Productive dialogue results in action" / "Les comités de sécurité : un atout précieux"; "Acheson: successful in getting new shop for welders" / "Acheson : nouvel atelier de soudage plus sécuritaire"; "Melville targets safety at level crossings" / "Melville : priorité à la sécurité aux passages à niveau"; Talbotville-St. Thomas: members speak out" / "St. Thomas-Talbotville : la parole est aux membres"; "One for all and all for one!" / "Montréal, Rive-Sud et Ottawa : tous pour un et un pour tous"; "Saint John: Committee meetings produce results"/ "Saint John : l'efficacité est à l'ordre du jour"; "Thunder Bay: walkabout committee takes bear problem in stride" / "Thunder Bay : un problème... une solution"; "Halifax: weathers all safety challenges" / "Halifax : il peut bien pleuvoir, gêler ou neiger..."
 Page(s): Various
 Code: II-4-c.e / II-4-c.f

III. RAIL LINES / ÉCHO RAIL

Distribution: Atlantic Region employees and pensioners

- 1. **Issue: Vol. 10, No. 1 -- January 1993**
 - a. Type I Article: Management column
 No management column in this issue.
 Codes: III-1-a.E / III-1-a.F
 - b. Type II Article: Editorial
 No editorial in this issue
 Codes: III-1-b.E / III-1-b.F
 - c. Type III Article: Main Article
 Title: Disruptions in service -- how they impact CN and its customers / Les interruptions de service : leur impact sur le CN et ses clients
 Page(s): 1
 Codes: III-1-c.E / III-1-c.F
- 2. **Issue: Vol. 10, No. 2 -- February/March 1993**
 - a. Type I Article: Management column
 No management column in this issue.
 Codes: III-2-a.E / III-2-a.F
 - b. Type II Article: Editorial
 No editorial in this issue.
 Codes: III-2-b.E / III-2-b.F
 - c. Type III article: Main article
 Title: Major restructuring to take place on the Atlantic region / Réorganisation de la région de l'Atlantique

Page(s): 1

Codes: III-2-c.E / III-2-c.F

3. Issue: Vol. 10, No. 3 -- April 1993

- a. Type I Article: Management column

No management column in this issue

Codes: III-3-a.E / III-3-a.F

- b. Type II Article: Editorial

No editorial in this issue

Codes: III-3-b.E / III-3-b.F

- c. Type III article: Main article

Title: New intermodal terminal for Halifax / Un nouveau terminal intermodal pour Halifax

Page(s): 1

Codes: III-3-c.E / III-3-c.F

4. Issue: vol. 10, No. 4 -- May 1993

- a. Type I Article: Management column

No management column in this issue.

Codes: III-4-a.E / III-4-a.F

- b. Type II Article: Editorial

No editorial in this issue.

Codes: III-4-a.E / III-4-a.F

- c. Type III Article: Main article

Title: CN: a progressive approach to safety issues / Fiche sécurité : le CN adopte une approche progressive

Page(s): 1

Codes: III-4-c.E / III-4-c.F

5. Issue: Vol. 10, No. 5 -- June 1993

- a. Type I Article: Management column

No management column in this issue.

Codes: III-5-a.E / III-5-a.F

- b. Type II Article: Editorial

No editorial in this issue.

Codes: III-5-b.E / III-5-b.F

- c. Type III Article: Main Article

Title: CN-Maritime Ontario: working together to serve customers better / Le CN et Maritime-Ontario concluent une alliance à long terme

Page(s): 1

Codes: III-5-c.E / III-5-c.F

6. Issue: Vol. 10, No. 6 -- July/August 1993

- a. Type I Article: Management column
No management column in this issue.
Codes: III-6-a.E / III-6-a.F
- b. Type II Article: Editorial
No editorial in this issue.
Codes: III-6-b.E / III-6-b.F
- c. Type III Article: Main article
Title: CN's Maritime District earns prestigious system safety awards / Prix de sécurité : le district des Maritimes gagne 25 000\$
Page(s): 1
Codes: III-6-c.E / III-6-c.F

7. Issue: Vol. 10, No. 8 -- October 1993

- a. Type I Article -- Management column
No management column in this issue
Codes: III-7-a.E / III-7-a.F
- b. Type II Article -- Editorial
No editorial in this issue.
Codes: III-7-b.E / III-7-b.F
- c. Type III Article -- Main Article
Title: Crew calling centre in Moncton : state of the art geared to customer service / Le Centre de gestion des équipes à Moncton : des plus modernes pour mieux servir les clients
Page(s): 1
Codes: III-7-c.E / III-7-c.F

8. Issue: Vol. 10, No. 9 -- November 1993

- a. Type I Article: Management column
No management column in this issue.
Codes: III-8-a.E / III-8-a.F
- b. Type II Article: Editorial
No editorial in this issue.
Codes: III-8-b.E / III-8-b.F
- c. Type III Article: Main article
Title: A new beginning for the Truro-Sydney line / Renaissance de la ligne Truro-Sydney
Page(s): 1
Codes: III-8-c.E / III-8-c.F

9. **Issue: Vol. 10, No. 10 -- December 1993**
 - a. Type I Article: Management column
Vice-President's message
Title: We're making real progress / Canadien National fait de beaux progrès
Page(s): 2
Codes: III-9-a.E / III-9-a.F
 - b. Type II Article: Editorial
No editorial in this issue.
Codes: III-9-b.E / III-9-b.F
 - c. Type III Article: Main article
Title: Halifax Intermodal Terminal: opening the door to North America / Le terminal intermodal de Halifax : porte sur l'Amérique du Nord
Page(s): 1
Codes: III-9-c.E III-9-c.F

IV. LE LAURENTIEN / THE LAURENTIAN

Distribution: All St. Lawrence Region employees

1. **Issue: Vol. 1, No. 1 -- March/April 1994**
 - a. Type I Article: Management column
No management column in this issue.
Codes: IV-1-a.E / IV-1-a.F
 - b. Type II Article: Editorial
Title: Quand un message est crédible, il pass... / Talking the same language
Page(s): 3
Codes: IV-1-b.E / IV-1-b.F
 - c. Type III Article: Main article
Title: Une restructuration essentielle / Redesigning the railway
Page(s): 4 - 5
Codes: IV-1-c.E / IV-1-b.F
2. **Issue: Vol. 1, No. 2 -- May/June 1994**
 - a. Type II Article: Management column
No management column in this issue.
Codes: IV-2-a.E / IV-2-a.F
 - b. Type II Article: Editorial
Title: Le conformisme - père de bien des maux chez nous... / Conformity -- the root of a lot of our problems
Page(s): 3
Codes: IV-2-b.E / IV-2-b.F

- c. Type III Article: Main Article
Title: Le pari de mieux servir les clients / A win-win partnership
Page(s): 6-7
Code: IV-2-c.E / IV-2-c.F

- 3. **Issue: Vol. 1, No. 3 -- July/August 1994**
 - a. Type I Article: Management column
No management column in this issue.
Codes: IV-3-a.E / IV-3-a.F
 - b. Type II Article: Editorial
Title: Famille et carrière... / Three nestlings
Page(s): 3
Codes: IV-3-b.E / IV-3-b.F
 - c. Type III Article: Main Article
Series of articles on families
Titles: Quelles familles / It's all in the family -- S'approprier pour mieux se reconstituer / Making adjustments to rebuild family unit -- Cela a commencé par un coup de foudre... / Head over heels in love -- La superwoman change de modèle / Trading superwoman in for a new model -- Un clan tricoté serré... / A close-knit family -- Entre le travail et les enfants, du bonheur organisé... / Work and family - what more could you want?
Page(s): 5-10
Codes: IV-3-c.E / IV-3-c.F

- 4. **Issue: Vol. 1, No. 4 -- September/October 1994**
 - a. Type I Article: Management column
No management column
Codes: IV-4-a.E / IV-4-a.F
 - b. Type II Article: Editorial
Title: Un coach positif / A CN coach
Page(s): 3
Codes: IV-4-b.E / IV-4-b.F
 - c. Type III Article: Main article
Series of articles about on-the-job rehabilitation
Titles: Faire aussi bien autrement... / Another way to get the job done just as well -- Vaincre l'incertitude / Overcoming anxiety -- Apprendre à vivre autrement... / Learning to live again -- Le drame de l'incertitude du retour au travail / the stress of coping with uncertainty -- L'imagination porte fruit au point de Beloeil / Putting imagination to work -- Accepter ce qu'on ne peut changer / Accepting things we can't change
Page(s): 6-10
Codes: IV-4-c.E / IV-4-c.F

5. Issue: Vol. 1, No. 5 -- November/December 1994

- a. Type I Article: Management column
Vice-President's message (run in place of the editorial)
Title: Une grosse année / A long year
Page(s): 3
Codes: IV-5-a.E / IV-5-a.F
- b. Type II Article: Editorial
No editorial in this issue.
Codes: IV-5-b.E / IV-5-b.F
- c. Type III Article: Main article
Title: Une leçon de savoir faire / Some like it hot!
Page(s): 6-7
Codes: IV-5-c.E / IV-5-c.F

V. À LA POINTE DU FUTUR / POINT TO THE FUTURE

Distribution: All employees of the AMF division

1. Issue: Vol. 7, No. 1 -- January/February 1993

- a. Type I Article: Management column
President's message
Title: Chez AMF on est fier d'y être et fier d'en être / AMF -- proud to be in it,
proud to be part of it
Page(s): 3
Codes: V-1-a.E / V-1-a.F
- b. Type II Article: Editorial
Title: Nous croyons que la force de l'entreprise repose sur un personnel qualifié,
motivé et engagé / We believe that the strength of the company depends on our
having a qualified, motivated, and committed work force
Page(s): 2
Codes: V-1-b.E / V-1-b.F
- c. Type III Article: Main article
Title: La division des autocars d'AMF est née / The AMF bus division is born!
Page(s): 1 & 10
Codes: V-1-c.E / V-1-c.F

2. **Issue: Vol. 7, No. 2 -- March/April 1993**
 - a. Type I Article: Management column
President's message
Title: L'ouverture d'esprit comme plus grand dénominateur commun / An open mind: the greatest common denominator
Page(s): 3
Codes: V-2-a.E / V-2-a.F
 - b. Type II Article: Editorial
Title: Place à l'innovation / The innovative approach
Page(s): 2
Codes: V-2-b.E / V-2-b.F
 - c. Type III Article: Main article
Title: Ce n'est qu'un début! / It's only the beginning!
Page(s): 1 & 10
Codes: V-2-c.E / V-2-c.F

3. **Issue: Vol. 7, No. 3 -- June/July 1993**
 - a. Type I Article: Management column
President's message
Title: Positive momentum / Positive Momentum
Page(s): 3
Codes: V-3-a.E / V-3-a.F
 - b. Type II Article: Editorial
Title: La responsabilité / Accountability
Page(s): 2
Codes: V-3-b.E / V-3-b.F
 - c. Type III Article: Main article
Title: Déjeuner-causerie du 4 mai 1993 / May 4, 1993 Business Luncheon
Page(s): 3 & 10
Codes: V-3-c.E / V-3-c.F

4. **Issue: Vol. 7, No. 4 -- August/September 1993**
 - a. Type I Article: Management column
President's message
Title: La rumeur, l'explication et la réalité / Rumour, fact and reality
Page(s): 3
Codes: V-4-a.E / V-4-a.F
 - b. Type II Article: Editorial
Title: Les nouvelles contraintes de la production / New production constraints
Page(s): 2
Codes: V-4-b.E / V-4-b.F

- c. Type III Article: Main article
Title: AMF se constitue en société / AMF Technotransport incorporated
Page(s): 3 & 10
Codes: V-4-c.E / V-4-c.F

VI. INFORUM / INFORUM

Distribution: All I.S. department employees

1. Issue: Winter/Spring 1994

- a. Type I Article: Management column
Title: Tête-à-tête with our VP /Nouvelles de la vice-présidence
Page(s): 2-3
Codes: VI-1-a.E / VI-1-a.F
- b. Type II Article: Editorial
No editorial in this issue.
Codes: VI-1-a.E / VI-1-a.F
- c. Type III Article: Main article
Title: CEO gives first departmental address to IS / Première rencontre du pdg et des SI
Page(3): 1
Codes: VI-1-c.E / VI-1-c.F

2. Issue: Spring/Summer 1994

- a. Type I article: Management column
Interview with the departmental VP
Title: Tête-à-tête with our VP /Nouvelles de la vice-présidence
Page(s): 6-7
Codes: VI-2-a.E / VI-2-a.F
- b. Type II Article: Editorial
No editorial in this issue
Codes: VI-2-a.E / VI-2-a.F
- c. Type III Article: Main article
Title: New director takes on the telecommunications challenge / Un nouveau directeur relève le défi des télécommunications
Page(s): 1-2-3-4
Codes: VI-2-c.E / VI-2-c.F

APPENDIX II

Translator Survey

SURVEY

I would greatly appreciate it if you would take five minutes of your time to complete the following brief survey. The purpose of this survey is to determine what translators perceive their role as. The data you provide will remain confidential and will be used solely for my Ph.D. thesis.

SURVEY

Gender: _____

Age: _____

Education: D.E.C.: _____
 B.A. _____
 M.A. _____
 Other: _____

Translate: From: _____ To: _____

No. of years as a translator: _____

Specialization: Technical translation: _____

 Administrative translation: _____

 No specialization: _____

Type of documents translated (in order, based on amount of time spent doing that type of work):

What is the company's primary reason for translating the type of documents you spend most of your time translating (i.e. for comprehension, respect of language legislation, to meet employees' language needs, to meet employees' language rights, etc.): _____

As a translator:

- | | | |
|------|---|-----|
| 1. | Do you correct content/factual errors? | Y N |
| 1.a) | Do you notify the author about such errors? | Y N |
| 2. | Do you improve the writer's style? | Y N |
| 3. | Do you clarify/explicate the writer's thoughts? | Y N |
| 4. | Do you correct or report language errors which you notice in company materials? | Y N |

5. Are you responsible for ensuring language quality within the company?

Y N

At what point are you, as a translator, brought into a project?

_____ Planning stage

_____ When a document is being written in the source language

_____ After the document has been written in the source language

Comments:

Finally, please define your role as a translator in your own words.

APPENDIX III

Summary of Data from Translator Survey

Gender	No.
Male	2
Female	7
Total	9

Table 1: Gender of Translators

Age	No.
20-25	0
26-30	0
31-35	3
36-40	1
41-45	1
46-50	2
51-55	1
56-60	0
61-65	1
Total	8

Table 2: Age of Translators

Education	No.
D.E.C.	1
B.A. (Translation)	4
M.A. (Translation)	2
Other	2
Total	9

Table 3: Education of Translators

Translation direction	No.
English to French	7
French to English	2
Total	9

Table 4: Translation Direction

Years as a translator	No.
0-5	2
6-10	0
11-15	2
16-20	2
21-25	2
26-30	1
31-35	0
36-40	0
Total	9

Table 5: Experience (in years)

Specialization	No.
Technical	2
Administrative	1
No specialization	6
Total	9

Table 6: Specialization

Vehicles translated by respondents	
Vehicle	Respondent(s)
Keeping Track / Au fil du rail	E-F freelance translator
Eye on Safety / Prévenir	E-F full-time translator
Rail Lines / Écho rail	E-F full-time translator (Moncton)
The Laurentian / La Laurentienne	F-E full-time translators (2)
Point to the Future / Point au future	F-E full-time translators (2)
Inforum / Inforum	E-F full-time translators (2)

Table 7: Vehicles Translated

Company's reasons for translating: What is the company's primary reason for translating the type of documents you spend most of your time translating (i.e. for comprehension, respect of language legislation, to meet employees' language needs, to meet employees' language rights, etc.)?	
Comprehension	2
Respect of language legislation	6
To meet employees' language needs	6
To respect employees' language rights	5
To meet customers' language needs	1
Total	20 ¹

Table 8: Company's Reasons for Translating

Responses to questions			
Question	Yes	No	No answer
As a translator, do you correct content/factual errors?	9		
Do you notify the author about such errors?	9		
As a translator, do you improve the writer's style?	9		
As a translator, do you clarify/explicate the writer's thoughts?	8		1
As a translator, do you correct or report language errors which you notice in company materials?	8	1 ²	
As a translator, are you responsible for ensuring language quality within the company?	5	2 ³	2

Table 9: Responses to Questions

¹ Several of the respondents indicated more than one reason.

² One English-French full-time translator replied in the negative.

³ One French-English full-time translator and the English-French freelance translator replied in the negative.

When is the translator brought into a project?	
Planing stage	1*
When a document is being written in the source language	
After a document has been written in the source language	9
Total	10 ⁴

Table 10: When Translator is Brought into Project

Definition of role as translator	
Essential link in communication process	7
To help bridge language barriers	3
No comment	3
Total	13 ⁵

Table 11: Definition of Role of Translator

⁴ The French-English full-time translator indicated that she is very occasionally brought into the project at the planning stage, but that most of the time she is contacted after the document has been written in the source language.

⁵ Some of the respondents provided more than one definition.

Comments	
Translator	Comment
English-French freelance translator	“Il serait parfois bon que le traducteur participe à l’élaboration d’un projet ce qui simplifierait sa tâche et permettrait une meilleur compréhension du texte.”
French-English full-time translator	“There are few people who incorporate translation into their project planning. In 90% of the cases, translation is an afterthought. French-to-English, in particular, is characteristic of this (at CN). Deadlines are tight; texts are short; in most cases they are required for comprehension purposes only. When we are asked to be part of the planning stage (ex.: The Laurentian), the work is more interesting because we have a say in how the work gets done.”
English-French full-time translator (Moncton)	“When I translate, I often propose changes to source language documents in order to improve them. I’m very picky. If I find errors in content or factual errors, I always call the author/client to advise them.”
English-French full-time translator	“I improve the writer’s style as much as I can as long as the customer is competent enough in French in the field and is not too scared of adaptation.”

Table 12: Translators’ Comments

APPENDIX IV

Statistics and Readability Data

I. *Keeping Track / Au fil du rail*

Keeping Track / Au fil du rail -- Vol. 29, No. 1 -- Management Column		
English text (original) I-1-a.E		French text (translation) I-1-a.F
<i>"Changing for the better"</i>		<i>"Changer pour le mieux"</i>
835	Words	848
39	Sentences	36
12	Paragraphs	12
11	Long Sentences > 30 words	7
8	Short Sentences < 14 words	5
21.4	Words per Sentence	23.5
3.3	Sentences per Paragraph	3
41	Maximum words/sentence	47
59	Flesch reading index	41.6
--	Richardeau Flesch reading index (French only)	62.5

Keeping Track / Au fil du rail – Vol. 29, No. 1 – Feature Article		
English text (original) I-1-c.E		French text (translation) I-1-c.F
<i>“Out to win”</i>		<i>“Faire ce qu’il faut pour gagner”</i>
1093	Words	1192
70	Sentences	58
15	Paragraphs	21
5	Long Sentences > 30 words	9
36	Short Sentences < 14 words	17
15.6	Words per Sentence	20.6
4.7	Sentences per Paragraph	2.76
39	Maximum words/sentence	57
67.9	Flesch reading index	47.2
–	Richardeau Flesch reading index (French only)	70.8

Keeping Track / Au fil du rail -- Vol. 29, No. 2 -- Management Column		
English text (original) I-2-a.E		French text (translation) I-2-a.F
<i>“Linking individual performance to corporate objectives”</i>		<i>“Rendement individuel et objectifs d’entreprise : des éléments indissociables”</i>
603	Words	706
29	Sentences	31
12	Paragraphs	10
3	Long Sentences > 30 words	6
6	Short Sentences < 14 words	9
20.8	Words per Sentence	22.78
2.4	Sentences per Paragraph	3.1
61	Maximum words/sentence	85
40.5	Flesch reading index	28.9
—	Richardeau Flesch reading index (French only)	43.4

Keeping Track / Au fil du rail – Vol. 29, No. 2 – Feature Article		
English text (original) I-2-c.E		French text (translation) I-2-c.F
<i>“Grand Trunk & Santa Fe team with General Motors to serve the North American auto buyer”</i>		<i>“Collaboration et qualité totale au service de l’industrie automobile”</i>
722	Words	894
36	Sentences	37
17	Paragraphs	15
4	Long Sentences > 30 words	8
5	Short Sentences < 14 words	3
20.1	Words per Sentence	24.2
2.1	Sentences per Paragraph	2.5
49	Maximum words/sentence	56
45.2	Flesch reading index	29.9
–	Richardeau Flesch reading index (French only)	44.9

Keeping Track / Au fil du rail – Vol. 29, No. 3 – Management Column		
English text (original) I-3-a.E		French text (translation) I-3-a.F
<i>“Going beyond the classroom”</i>		<i>“La formation continue : un gage de réussite”</i>
571	Words	600
31	Sentences	34
8	Paragraphs	8
6	Long Sentences > 30 words	2
14	Short Sentences < 14 words	10
18.4	Words per Sentence	17.6
3.9	Sentences per Paragraph	4.3
45	Maximum words/sentence	43
56.7	Flesch reading index	29.9
--	Richardeau Flesch reading index (French only)	44.9

Keeping Track / Au fil du rail – Vol. 29, No. 3 – Feature Article		
English text (original) I-3-c.E		French text (translation) I-3-c.F
<i>“Tellier reviews progress to date”</i>		<i>“La situation des femmes au CN : où en sommes-nous?”</i>
655	Words	788
23	Sentences	29
13	Paragraphs	13
7	Long Sentences > 30 words	6
1	Short Sentences < 14 words	2
28.5	Words per Sentence	27.2
1.77	Sentences per Paragraph	2.2
67	Maximum words/sentence	60
43.3	Flesch reading index	32.3
—	Richardeau Flesch reading index (French only)	48.5

Keeping Track / Au fil du rail – Vol. 29, No. 4 – Management Column		
English text (original) I-4-a.E		French text (translation) I-4-a.F
<i>“Safety rules”</i>		<i>“La sécurité passe avant tout...”</i>
489	Words	567
29	Sentences	28
8	Paragraphs	7
1	Long Sentences > 30 words	2
9	Short Sentences < 14 words	7
16.9	Words per Sentence	20.25
3.6	Sentences per Paragraph	4.0
34	Maximum words/sentence	34
57.4	Flesch reading index	39.9
--	Richardeau Flesch reading index (French only)	59.9

Keeping Track / Au fil du rail – Vol. 29, No. 4 – Feature Article		
English text (original) I-4-c.E		French text (translation) I-4-c.F
<i>“It’s not by chance we’re one of the safest”</i>		<i>“Nos efforts ont porté fruit”</i>
614	Words	757
28	Sentences	27
12	Paragraphs	11
4	Long Sentences > 30 words	9
4	Short Sentences < 14 words	1
21.9	Words per Sentence	28.1
2.3	Sentences per Paragraph	2.45
43	Maximum words/sentence	61
49.4	Flesch reading index	32.8
–	Richardeau Flesch reading index (French only)	49.2

Keeping Track / Au fil du rail -- Vol. 29, No. 5 -- Management Column		
English text (original) I-5-a.E		French text (translation) I-5-a.F
<i>“Intermodal partnerships with carriers and employees”</i>		<i>“Transporteurs et personnel : une question de partenariat”</i>
614	Words	755
27	Sentences	25
15	Paragraphs	14
5	Long Sentences > 30 words	8
5	Short Sentences < 14 words	4
22.7	Words per Sentence	30.2
1.8	Sentences per Paragraph	1.8
49	Maximum words/sentence	89
41.9	Flesch reading index	21.3
--	Richardeau Flesch reading index (French only)	32.0

Keeping Track / Au fil du rail – Vol. 29, No. 5 – Feature Article		
English text (original) I-5-c.E		French text (translation) I-5-c.F
<i>“Sometimes competitors are customers”</i>		<i>“Nos concurrents sont parfois nos clients”</i>
618	Words	807
30	Sentences	27
9	Paragraphs	9
4	Long Sentences > 30 words	9
5	Short Sentences < 14 words	1
20.5	Words per Sentence	29.9
3.3	Sentences per Paragraph	3.0
56	Maximum words/sentence	81
45.7	Flesch reading index	22.6
--	Richardeau Flesch reading index (French only)	33.95

Keeping Track / Au fil du rail – Vol. 29, No. 6 – Management Column		
English text (original) I-6-a.E		French text (translation) I-6-a.F
<i>“Our strategy is on target”</i>		<i>“Notre stratégie porte fruit”</i>
494	Words	532
25	Sentences	26
7	Paragraphs	8
4	Long Sentences > 30 words	4
7	Short Sentences < 14 words	13
19.76	Words per Sentence	20.5
3.6	Sentences per Paragraph	3.3
43	Maximum words/sentence	51
53.3	Flesch reading index	33.7
–	Richardeau Flesch reading index (French only)	50.6

Keeping Track / Au fil du rail -- Vol. 29, No. 6 -- Feature Article		
English text (original) I-6-c.E		French text (translation) I-6-c.F
<i>“Process improvement: from philosophy to practice”</i>		<i>“Amélioration de nos façons de faire”</i>
761	Words	920
40	Sentences	43
11	Paragraphs	12
5	Long Sentences > 30 words	6
16	Short Sentences < 14 words	10
19.0	Words per Sentence	21.4
3.6	Sentences per Paragraph	3.6
41	Maximum words/sentence	49
55.1	Flesch reading index	39.6
--	Richardeau Flesch reading index (French only)	59.5

Keeping Track / Au fil du rail -- Vol. 29, No. 7 -- Management Column		
English text (original) I-7-a.E		French text (translation) I-7-a.F
<i>"Above and beyond"</i>		<i>"Un peu plus haut, un peu plus loin"</i>
484	Words	469
33	Sentences	30
10	Paragraphs	10
2	Long Sentences > 30 words	2
18	Short Sentences < 14 words	12
14.7	Words per Sentence	15.6
3.3	Sentences per Paragraph	3.0
32	Maximum words/sentence	42
59.4	Flesch reading index	45.5
--	Richardeau Flesch reading index (French only)	68.3

Keeping Track / Au fil du rail -- Vol. 29, No. 7 -- Feature Article		
English text (original) I-7-c.E		French text (translation) I-7-c.F
<i>"The Auburn terminal -- catching the wave of the future"</i>		<i>"Un nouveau terminal intermodal ouvrira ses portes à Auburn"</i>
652	Words	624
28	Sentences	29
8	Paragraphs	12
4	Long Sentences > 30 words	6
2	Short Sentences < 14 words	6
23.3	Words per Sentence	21.5
3.5	Sentences per Paragraph	2.4
61	Maximum words/sentence	35
55.7	Flesch reading index	40.3
--	Richardeau Flesch reading index (French only)	60.5

Keeping Track / Au fil du rail – Vol. 29, No. 8 – Management Column		
English text (original) I-8-a.E		French text (translation) I-8-a.F
<i>“Speaking of results”</i>		<i>“En parlant de résultats...”</i>
607	Words	608
31	Sentences	31
10	Paragraphs	10
1	Long Sentences > 30 words	5
8	Short Sentences < 14 words	7
19.6	Words per Sentence	19.6
3.1	Sentences per Paragraph	3.1
38	Maximum words/sentence	35
46.9	Flesch reading index	32.1
--	Richardeau Flesch reading index (French only)	48.2

Keeping Track / Au fil du rail – Vol. 29, No. 8 – Feature Article		
English text (original) I-8-c.E		French text (translation) I-8-c.F
<i>“Sharing the fruits of our labor”</i>		<i>“Un même effort, une même réussite”</i>
276	Words	290
11	Sentences	13
5	Paragraphs	6
3	Long Sentences > 30 words	2
1	Short Sentences < 14 words	2
25.1	Words per Sentence	22.3
2.2	Sentences per Paragraph	2.2
54	Maximum words/sentence	36
43.6	Flesch reading index	26.0
--	Richardeau Flesch reading index (French only)	39.0

Keeping Track / Au fil du rail -- Vol. 29, No. 9 -- Management Column		
English text (original) I-9-a.E		French text (translation) I-9-a.F
<i>“Ending the year in high style”</i>		<i>“Une année qui se termine en beauté”</i>
695	Words	727
28	Sentences	33
19	Paragraphs	19
9	Long Sentences > 30 words	6
1	Short Sentences < 14 words	6
24.8	Words per Sentence	22.03
1.47	Sentences per Paragraph	1.74
43	Maximum words/sentence	47
50.1	Flesch reading index	42.3
--	Richardeau Flesch reading index (French only)	63.5

Keeping Track / Au fil du rail – Vol. 29, No. 9 – Feature Article		
English text (original) I-9-c.E		French text (translation) I-9-c.F
<i>“The little locomotive that could”</i>		<i>“Du bout des doigts...”</i>
456	Words	584
29	Sentences	25
8	Paragraphs	10
1	Long Sentences > 30 words	5
10	Short Sentences < 14 words	6
15.7	Words per Sentence	23.4
3.6	Sentences per Paragraph	2.5
57	Maximum words/sentence	65
53.6	Flesch reading index	24.8
--	Richardeau Flesch reading index (French only)	37.2

II. Eye on Safety / Prévenir

Eye on Safety / Prévenir -- Vol. 3, No. 1 -- Editorial		
English text (original) II-1-b.E		French text (translation) II-1-b.F
<i>“Emotional video shows how to stay alive on the job”</i>		<i>“La communication par l’émotion”</i>
503	Words	503
35	Sentences	35
10	Paragraphs	11
2	Long Sentences > 30 words	1
17	Short Sentences < 14 words	14
14.4	Words per sentence	14.4
3.5	Sentences per paragraph	3.2
49	Maximum words/sentence	32
66.0	Flesch reading index	55
	Richardeau Flesch reading index (French only)	82.5

Eye on Safety / Prévenir – Vol. 3, No. 1 – Feature Article		
English text (original) II-1-c.E		French text (translation) II-1-c.F
<i>“Safety is good business”</i>		<i>“La sécurité est rentable”</i>
446	Words	506
21	Sentences	24
11	Paragraphs	11
1	Long Sentences > 30 words	2
3	Short Sentences < 14 words	3
21.2	Words per sentence	21.0
2.0	Sentences per paragraph	2.2
46	Maximum words/sentence	42
61.0	Flesch reading index	42
	Richardeau Flesch reading index (French only)	63

Eye on Safety / Prévenir -- Vol. 3, No. 2 -- Editorial		
English text (original) II-2-b.E		French text (translation) II-2-b.F
<i>"Risk being late or being 'the late'?"</i>		<i>"Risquer d'être en retard ou de ne plus 'être'"</i>
525	Words	483
36	Sentences	35
10	Paragraphs	10
0	Long Sentences > 30 words	1
16	Short Sentences < 14 words	19
14.6	Words per sentence	13.8
3.6	Sentences per paragraph	3.5
30	Maximum words/sentence	38
80.0	Flesch reading index	63
	Richardeau Flesch reading index (French only)	94.5

Eye on Safety / Prévenir – Vol. 3, No. 2 – Feature Article (series of articles)		
English text (original) II-2-c.E		French text (translation) II-2-c.F
<i>“Extensive training fuels CN’s safe operations”;</i> <i>“Locomotive engineers get real taste for safe operations”;</i> <i>Safety” a strategic value at CN”;</i> <i>“Safety: a strategic value at CN”;</i> <i>“Entire Operations Training curriculum stresses safety”</i>		<i>“Formation et sécurité : l’une ne va pas sans l’autre...”;</i> <i>“Les mécaniciens de locomotive sur... la voie de la sécurité”;</i> <i>“La sécurité est une valeur stratégique”;</i> <i>“Au menu de la Formation exploitation : cours actualisés, vidéos et briefings... enrobés de sécurité”</i>
1720	Words	1982
70	Sentences	82
37	Paragraphs	37
17	Long Sentences > 30 words	25
9	Short Sentences < 14 words	5
24.6	Words per sentence	24.2
1.9	Sentences per paragraph	2.2
48	Maximum words/sentence	59
41.8	Flesch reading index	28
	Richardeau Flesch reading index (French only)	42

Eye on Safety / Prévenir -- Vol. 3, No. 3 -- Feature Article		
English text (original) II-3-c.E		French text (translation) II-3-c.F
<i>"The Nakina derailment"</i>		<i>"Le déraillement de Nakina"</i>
2180	Words	2470
99	Sentences	101
41	Paragraphs	39
9	Long Sentences > 30 words	27
18	Short Sentences < 14 words	13
22.0	Words per sentence	24.5
2.41	Sentences per paragraph	2.6
47	Maximum words/sentence	60
42.6	Flesch reading index	31
	Richardeau Flesch reading index (French only)	46.5

Eye on Safety / Prévenir -- Vol. 3, No. 4 -- Editorial		
English text (original) II-4-b.E		French text (translation) II-4-b.F
<i>"At home, at work, at play – safety starts with us"</i>		<i>"La sécurité, c'est l'affaire de tous!"</i>
523	Words	517
40	Sentences	30
9	Paragraphs	10
2	Long Sentences > 30 words	3
25	Short Sentences < 14 words	14
13.1	Words per sentence	17.2
4.4	Sentences per paragraph	3
37	Maximum words/sentence	56
63.1	Flesch reading index	41
	Richardeau Flesch reading index (French only)	61.5

Eye on Safety / Prévenir -- Vol. 3, No. 4 -- Feature Article (series of articles)		
English text (original) II-4-c.E		French text (translation) II-4-c.F
<i>"Productive dialogue results in action"; "Acheson: successful in getting new shop for welders"; "Melville targets safety at level crossings"; Talbotville-St. Thomas: members speak out"; "One for all and all for one!"; "Saint John: Committee meetings produce results"; "Thunder Bay: walkabout committee takes bear problem in stride"; "Halifax: weathers all safety challenges"</i>		<i>"Melville : priorité à la sécurité aux passages à niveau"; "St. Thomas-Talbotville : la parole est aux membres"; "Les comités de sécurité : un atout précieux"; "Acheson : nouvel atelier de soudage plus sécuritaire"; "Montréal, Rive-Sud et Ottawa : tous pour un et un pour tous"; "Saint John : l'efficacité est à l'ordre du jour"; "Thunder Bay : un problème... une solution"; "Halifax : il peut bien pleuvoir, geler ou neiger..."</i>
3607	Words	4017
182	Sentences	184
62	Paragraphs	63
20	Long Sentences > 30 words	26
45	Short Sentences < 14 words	36
19.8	Words per sentence	21.8
2.9	Sentences per paragraph	2.9
50	Maximum words/sentence	58
53.1	Flesch reading index	41
	Richardeau Flesch reading index (French only)	61.5

III. Rail Lines / Écho Rail

<i>Rail Lines / Écho Rail – Vol. 10, No. 1 – Feature Article</i>		
<i>English text (original)</i> <i>III-1-c.E</i>		<i>French text (translation)</i> <i>III-1-c.F</i>
<i>“Disruptions in service – how they impact CN and its customers”</i>		<i>“Les interruptions de service : leur impact sur le CN et ses clients”</i>
456	Words	570
23	Sentences	23
6	Paragraphs	6
3	Long Sentences > 30 words	6
5	Short Sentences < 14 words	2
19.8	Words per sentence	24.8
3.8	Sentences per paragraph	3.8
35	Maximum words/sentence	51
47.3	Flesch reading index	33
--	Richardeau Flesch reading index (French only)	49.5

Rail Lines / Écho Rail -- Vol. 10, No. 2 -- Feature Article		
English text (original) III-2-c.E		French text (translation) III-2-c.F
<i>“Major restructuring to take place on the Atlantic region”</i>		<i>“Réorganisation de la région de l’Atlantique”</i>
646	Words	712
27	Sentences	33
14	Paragraphs	14
5	Long Sentences > 30 words	5
3	Short Sentences < 14 words	5
23.9	Words per sentence	21.6
1.9	Sentences per paragraph	2.4
44	Maximum words/sentence	54
37.3	Flesch reading index	35
--	Richardeau Flesch reading index (French only)	52.5

Rail Lines / Écho Rail – Vol. 10, No. 3 – Feature Article		
English text (original) III-3-c.E		French text (translation) III-3-c.F
<i>“New intermodal terminal for Halifax”</i>		<i>“Un nouveau terminal intermodal pour Halifax”</i>
590	Words	688
22	Sentences	21
10	Paragraphs	10
8	Long Sentences > 30 words	12
3	Short Sentences < 14 words	2
26.8	Words per sentence	32.8
2.2	Sentences per paragraph	2.1
57	Maximum words/sentence	73
37.4	Flesch reading index	28
--	Richardeau Flesch reading index (French only)	42

Rail Lines / Écho Rail – Vol. 10, No. 4 – Feature Article		
English text (original) III-4-c.E		French text (translation) III-4-c.F
<i>“CN: a progressive approach to safety issues”</i>		<i>“Fiche sécurité : le CN adopte une approche progressive”</i>
723	Words	813
32	Sentences	34
8	Paragraphs	8
7	Long Sentences > 30 words	8
6	Short Sentences < 14 words	8
23.6	Words per sentence	23.9
4	Sentences per paragraph	4.3
54	Maximum words/sentence	66
42.5	Flesch reading index	25
--	Richardeau Flesch reading index (French only)	37.5

Rail Lines / Écho Rail – Vol. 10, No.5 – Feature Article		
English text (original) III-5-c.E		French text (translation) III-5-c.F
<i>“CN-Maritime Ontario: working together to serve customers better”</i>		<i>“Le CN et Maritime-Ontario concluent une alliance à long terme”</i>
534	Words	659
23	Sentences	23
9	Paragraphs	11
2	Long Sentences > 30 words	11
3	Short Sentences < 14 words	1
23.2	Words per sentence	28.7
2.6	Sentences per paragraph	2.1
41	Maximum words/sentence	50
39.1	Flesch reading index	27
--	Richardeau Flesch reading index (French only)	40.5

Rail Lines / Écho Rail – Vol. 10, No. 6 – Feature Article		
English text (original) III-6-c.E		French text (translation) III-6-c.F
<i>“CN’s Maritime District earns prestigious system safety awards”</i>		<i>“Prix de sécurité : le district des Maritimes gagne 25 000\$”</i>
294	Words	332
13	Sentences	17
5	Paragraphs	5
3	Long Sentences > 30 words	2
4	Short Sentences < 14 words	5
22.6	Words per sentence	19.5
2.6	Sentences per paragraph	3.4
58	Maximum words/sentence	66
50.7	Flesch reading index	44
--	Richardeau Flesch reading index (French only)	66

Rail Lines / Écho Rail – Vol. 10, No. 8 – Feature Article		
English text (original) III-7-c.E		French text (translation) III-7-c.F
<i>“Crew calling centre in Moncton: state of the art geared to customer service”</i>		<i>“Le Centre de gestion des équipes à Moncton : des plus modernes pour mieux servir les clients”</i>
755	Words	793
40	Sentences	40
9	Paragraphs	9
6	Long Sentences > 30 words	5
14	Short Sentences < 14 words	11
18.9	Words per sentence	19.8
4.4	Sentences per paragraph	4.4
44	Maximum words/sentence	46
58.9	Flesch reading index	42
--	Flesch reading index (French only)	63

Rail Lines / Écho Rail -- Vol. 10, No. 9 -- Feature Article		
English text (original) III-8-c.E		French text (translation) III-8-c.F
<i>"A new beginning for the Truro-Sydney line"</i>		<i>"Renaissance de la ligne Truro-Sydney"</i>
756	Words	771
34	Sentences	47
11	Paragraphs	10
4	Long Sentences > 30 words	3
17	Short Sentences < 14 words	18
22.2	Words per sentence	16.4
3.1	Sentences per paragraph	4.7
35	Maximum words/sentence	36
61.3	Flesch reading index	51
--	Flesch reading index (French only)	76.5

Rail Lines / Écho Rail – Vol. 10, No. 10 – Management Column		
English text (original) III-9-a.E		French text (translation) III-9-a.F
<i>“We’re making real progress”</i>		<i>“Canadien National fait de beaux progrès”</i>
803	Words	908
40	Sentences	40
10	Paragraphs	10
7	Long Sentences > 30 words	10
8	Short Sentences < 14 words	7
20.1	Words per sentence	22.7
4.0	Sentences per paragraph	4.0
41	Maximum words/sentence	42
49.2	Flesch reading index	35
--	Flesch reading index (French only)	52.5

Rail Lines / Écho Rail – Vol. 10, No. 10 – Feature Article		
English text (original) III-9-c.E		French text (translation) III-9-c.F
<i>“Halifax Intermodal Terminal: opening the door to North America”</i>		<i>“Le terminal intermodal de Halifax : porte sur l’Amérique du Nord”</i>
128	Words	155
5	Sentences	5
3	Paragraphs	3
2	Long Sentences > 30 words	2
0	Short Sentences < 14 words	0
25.6	Words per sentence	31.0
1.7	Sentences per paragraph	1.7
33	Maximum words/sentence	42
29.5	Flesch reading index	20
--	Flesch reading index (French only)	30

IV. *The Laurentian / Le Laurentien*

The Laurentian / Le Laurentien – Vol. 1, No. 1 – Editorial		
English text (translation) IV-1-b.E		French text (original) IV-1-b.F
<i>“Talking the same language”</i>		<i>“Quand un message est crédible, il passe...”</i>
515	Words	496
50	Sentences	54
12	Paragraphs	12
1	Long Sentences > 30 words	2
34	Short Sentences < 14 words	44
10.3	Words per sentence	9.2
4.2	Sentences per paragraph	4.5
27	Maximum words/sentence	36
71.2	Flesch reading index	58
--	Richardeau -Flesch reading index (French only)	87

The Laurentian / Le Laurentien -- Vol. 1, No. 1 -- Feature Article		
English text (translation) IV-1-c.E		French text (original) IV-1-c.F
<i>"Redesigning the railway"</i>		<i>"Une restructuration essentielle"</i>
450	Words	524
21	Sentences	20
5	Paragraphs	6
2	Long Sentences > 30 words	5
6	Short Sentences < 14 words	4
21.4	Words per sentence	26.2
4.2	Sentences per paragraph	3.3
41	Maximum words/sentence	51
49.0	Flesch reading index	33
--	Richardeau-Flesch reading index (French only)	49.5

The Laurentian / Le Laurentien – Vol. 1, No. 2 – Editorial		
English text (translation) IV-2-b.E		French text (original) IV-2-b.F
<i>“Conformity — the root of a lot of our problems”</i>		<i>“Le conformisme — père de bien des maux chez nous...”</i>
418	Words	479
34	Sentences	35
11	Paragraphs	12
1	Long Sentences > 30 words	1
19	Short Sentences < 14 words	18
12.3	Words per sentence	13.7
3.1	Sentences per paragraph	2.9
40	Maximum words/sentence	35
75.0	Flesch reading index	58
—	Richardeau-Flesch reading index (French only)	87

The Laurentian / Le Laurentien -- Vol. 1, No. 2 -- Feature Article		
English text (translation) IV-2-c.E		French text (original) IV-2-c.F
<i>"A win-win partnership"</i>		<i>"Le pari de mieux servir les clients"</i>
381	Words	442
16	Sentences	16
7	Paragraphs	7
4	Long Sentences > 30 words	5
3	Short Sentences < 14 words	1
23.8	Words per sentence	27.6
2.3	Sentences per paragraph	2.3
40	Maximum words/sentence	53
58.1	Flesch reading index	34
--	Richardeau-Flesch reading index (French only)	51

The Laurentian / Le Laurentien -- Vol. 1, No. 3 -- Editorial		
English text (translation) IV-3-b.E		French text (original) IV-3-b.F
<i>"Three nestlings"</i>		<i>"Famille et carrière..."</i>
625	Words	603
40	Sentences	39
7	Paragraphs	7
4	Long Sentences > 30 words	7
19	Short Sentences < 14 words	16
15.6	Words per sentence	15.5
5.7	Sentences per paragraph	5.6
41	Maximum words/sentence	63
71.3	Flesch reading index	52
--	Richardeau-Flesch reading index (French only)	78

The Laurentian / Le Laurentien -- Vol. 1, No. 3 -- Feature (series of articles)		
English text (translation) IV-3-c.E		French text (original) IV-3-c.F
<i>"It's all in the family"; "Making adjustments to rebuild family unit"; "Head over heels in love"; "Trading superwoman in for a new model"; "C close-knit family"; "Work and family - - what more could you want"</i>		<i>"Quelles familles"; "S'approprier pour mieux se reconstituer"; "La superwoman change de modèle"; "Un clan tricoté serré"; "Entre le travail et les enfants, du bonheur organisé"</i>
3119	Words	3277
179	Sentences	185
55	Paragraphs	57
13	Long Sentences > 30 words	21
71	Short Sentences < 14 words	75
17.4	Words per sentence	17.5
3.3	Sentences per paragraph	3.2
58	Maximum words/sentence	51
65.3	Flesch reading index	51
--	Richardeau-Flesch reading index (French only)	76.5

The Laurentian / Le Laurentien -- Vol. 1, No. 4 -- Editorial		
English text (translation) IV-4-b.E		French text (original) IV-4-b.F
<i>"A CN coach"</i>		<i>"Un coach positif"</i>
659	Words	667
49	Sentences	49
9	Paragraphs	9
5	Long Sentences > 30 words	4
33	Short Sentences < 14 words	30
13.4	Words per sentence	13.6
5.4	Sentences per paragraph	5.4
54	Maximum words/sentence	65
69.8	Flesch reading index	59
--	Richardeau-Flesch reading index (French only)	88.5

The Laurentian / Le Laurentien – Vol. 1, No. 4 – Feature (series of articles)		
English text (translation) IV-4-c.E		French text (original) IV-4-c.F
<i>“Another way to get the job done”; Overcoming anxiety”; “Learning to live again”; “The stress of coping with uncertainty”; “Putting imagination to work”; “Accepting things we can’t change”</i>		<i>“Faire aussi bien autrement”; “Vaincre l’incertitude”; “Apprendre à vivre autrement”; “Le drame de l’incertitude du retour au travail”; “L’imagination porte fruit au point de Beloeil”; “Accepter ce qu’on ne peut changer”</i>
2871	Words	2922
152	Sentences	156
35	Paragraphs	36
20	Long Sentences > 30 words	21
54	Short Sentences < 14 words	63
18.9	Words per sentence	18.7
4.3	Sentences per paragraph	4.3
49	Maximum words/sentence	55
61.9	Flesch reading index	47
--	Richardeau-Flesch reading index (French only)	70.5

The Laurentian / Le Laurentien – Vol. 1, No. 5 – Management Column		
English text (translation) IV-5-a.E		French text (original) IV-5-a.F
<i>“A long year”</i>		<i>“Une grosse année”</i>
398	Words	428
24	Sentences	25
7	Paragraphs	7
2	Long Sentences > 30 words	2
12	Short Sentences < 14 words	11
16.6	Words per sentence	17.1
3.4	Sentences per paragraph	3.6
46	Maximum words/sentence	45
69.2	Flesch reading index	50
--	Richardeau-Flesch reading index (French only)	75

The Laurentian / Le Laurentien -- Vol. 1, No. 5 -- Feature Article		
English text (translation) IV-5-c.E		French text (original) IV-5-c.F
<i>"Some like it hot!"</i>		<i>"Une leçon de savoir faire"</i>
622	Words	635
28	Sentences	27
8	Paragraphs	9
4	Long Sentences > 30 words	7
4	Short Sentences < 14 words	6
22.2	Words per sentence	23.5
3.5	Sentences per paragraph	3.0
45	Maximum words/sentence	47
58.0	Flesch reading index	35
--	Richardeau-Flesch reading index (French only)	52.5

V. Point to the future / A la pointe du futur

Point to the Future / À la Pointe du futur – Vol. 7, No. 1 – Management Column		
English text (translation) V-1-a.E		French text (original) V-1-a.F
<i>“AMF – proud to be in it, proud to be part of it”</i>		<i>“Chez AMF on est fier d’y être”</i>
286	Words	316
14	Sentences	14
4	Paragraphs	5
2	Long Sentences > 30 words	3
3	Short Sentences < 14 words	1
20.4	Words per sentence	22.6
3.5	Sentences per paragraph	2.8
36	Maximum words/sentence	44
48.2	Flesch reading index	30
--	Richardeau-Flesch reading index (French only)	45

Point to the Future / À la Pointe du futur -- Vol. 7, No. 1 -- Editorial		
English text (translation) V-1-b.E		French text (original) V-1-b.F
<i>"We believe that the strength of the company depends on our having a qualified, motivated, and committed work force"</i>		<i>"Nous croyons que la force de l'entreprise repose sur un personnel qualifié, motivé et engagé"</i>
220	Words	265
14	Sentences	12
5	Paragraphs	5
0	Long Sentences > 30 words	1
4	Short Sentences < 14 words	1
15.7	Words per sentence	22.1
2.8	Sentences per paragraph	2.4
19	Maximum words/sentence	39
46.6	Flesch reading index	34
--	Richardeau-Flesch reading index (French only)	51

Point to the Future / À la Pointe du futur -- Vol. 7, No. 1 -- Feature Article		
English text (translation) V-1-c.E		French text (original) V-1-c.F
<i>"The AMF bus division is born!"</i>		<i>"La division des autocars d'AMF est née"</i>
250	Words	279
13	Sentences	12
3	Paragraphs	5
1	Long Sentences > 30 words	2
4	Short Sentences < 14 words	2
19.2	Words per sentence	23.3
4.3	Sentences per paragraph	2.4
37	Maximum words/sentence	35
47.5	Flesch reading index	36
--	Richardeau-Flesch reading index (French only)	54

Point to the Future / À la Pointe du futur – Vol. 7, No. 2 – Management Column		
English text (translation) V-2-a.E		French text (original) V-2-a.F
<i>“An open mind: the greatest common denominator”</i>		<i>“L’ouverture d’esprit comme plus grand dénominateur commun”</i>
336	Words	356
18	Sentences	16
5	Paragraphs	5
2	Long Sentences > 30 words	4
5	Short Sentences < 14 words	5
18.7	Words per sentence	22.3
3.6	Sentences per paragraph	3.2
41	Maximum words/sentence	42
52.9	Flesch reading index	35
--	Richardeau-Flesch reading index (French only)	52.5

Point to the Future / À la Pointe du futur -- Vol. 7, No. 2 -- Editorial		
English text (translation) V-2-b.E		French text (original) V-2-b.F
<i>"The innovative approach"</i>		<i>"Place à l'innovation"</i>
552	Words	581
30	Sentences	28
11	Paragraphs	11
3	Long Sentences > 30 words	6
9	Short Sentences < 14 words	9
18.4	Words per sentence	20.8
2.7	Sentences per paragraph	2.5
38	Maximum words/sentence	48
61.1	Flesch reading index	42
--	Richardeau-Flesch reading index (French only)	63

Point to the Future / À la Pointe du futur -- Vol. 7, No. 2 -- Feature Article		
English text (translation) V-2-c.E		French text (original) V-2-c.F
<i>"It's only the beginning"</i>		<i>"Ce n'est qu'un début!"</i>
354	Words	399
17	Sentences	18
4	Paragraphs	5
2	Long Sentences > 30 words	4
4	Short Sentences < 14 words	4
20.8	Words per sentence	22.2
4.3	Sentences per paragraph	3.6
53	Maximum words/sentence	40
50.5	Flesch reading index	43
--	Richardeau-Flesch reading index (French only)	64.5

Point to the Future / À la Pointe du futur -- Vol. 7, No. 3 -- Management Column		
English text (translation) V-3-a.E		French text (original) V-3-a.F
<i>"Positive momentum"</i>		<i>"Positive momentum"</i>
387	Words	392
21	Sentences	18
5	Paragraphs	5
2	Long Sentences > 30 words	5
8	Short Sentences < 14 words	3
18.4	Words per sentence	21.8
4.2	Sentences per paragraph	3.6
37	Maximum words/sentence	38
52.2	Flesch reading index	27
--	Richardeau-Flesch reading index (French only)	40.5

Point to the Future / À la Pointe du futur — Vol. 7, No. 3 — Editorial		
English text (translation) V-3-b.E		French text (original) V-3-b.F
<i>“Accountability”</i>		<i>“La responsabilité”</i>
397	Words	396
13	Sentences	14
6	Paragraphs	6
5	Long Sentences > 30 words	3
2	Short Sentences < 14 words	2
30.5	Words per sentence	28.3
2.2	Sentences per paragraph	2.3
120	Maximum words/sentence	113
50.7	Flesch reading index	42
--	Richardeau-Flesch reading index (French only)	63

Point to the Future / À la Pointe du futur -- Vol. 7, No. 3 -- Feature Article		
English text (translation) V-3-c.E		French text (original) V-3-c.F
<i>"May 4, 1993 business luncheon"</i>		<i>"Déjeuner-causerie du 4 mai 1993"</i>
538	Words	589
29	Sentences	30
11	Paragraphs	11
1	Long Sentences > 30 words	1
5	Short Sentences < 14 words	4
18.6	Words per sentence	19.6
2.6	Sentences per paragraph	2.7
31	Maximum words/sentence	31
43.8	Flesch reading index	32
--	Richardeau-Flesch reading index (French only)	48

Point to the Future / À la Pointe du futur – Vol. 7, No. 4 – Management Column		
English text (translation) V-4-a.E		French text (original) V-4-a.F
<i>“Rumour, fact and reality”</i>		<i>“La rumeur, l’explication et la réalité”</i>
358	Words	387
22	Sentences	24
6	Paragraphs	7
1	Long Sentences > 30 words	0
9	Short Sentences < 14 words	9
16.3	Words per sentence	16.1
3.7	Sentences per paragraph	3.4
34	Maximum words/sentence	30
54.5	Flesch reading index	37
--	Richardeau-Flesch reading index (French only)	55.5

Point to the Future / À la Pointe du futur – Vol. 7, No. 4 – Editorial		
English text (translation) V-4-b.E		French text (original) V-4-b.F
<i>“New production constraints”</i>		<i>“Les nouvelles contraintes de la production”</i>
355	Words	392
20	Sentences	22
6	Paragraphs	5
2	Long Sentences > 30 words	3
6	Short Sentences < 14 words	7
17.8	Words per sentence	17.8
3.3	Sentences per paragraph	4.4
37	Maximum words/sentence	44
47.6	Flesch reading index	35
--	Richardeau-Flesch reading index (French only)	52.5

Point to the Future / À la Pointe du futur -- Vol. 7, No. 4 -- Feature Article		
English text (translation) V-4-c.E		French text (original) V-4-c.F
<i>"AMF Technotransport incorporated"</i>		<i>"AMF se constitue en société"</i>
272	Words	295
12	Sentences	12
4	Paragraphs	5
4	Long Sentences > 30 words	3
3	Short Sentences < 14 words	2
22.7	Words per sentence	24.6
3	Sentences per paragraph	2.4
39	Maximum words/sentence	45
40.1	Flesch reading index	29
--	Richardeau-Flesch reading index (French only)	43.5

VI. Inforum

Inforum / Inforum -- Winter/Spring 1994 -- Management Column		
English text (original) VI-1-a.E		French text (translation) VI-1-a.F
<i>"Tête-à-tête with our VP"</i>		<i>"Nouvelles de la vice-présidence"</i>
1527	Words	1518
84	Sentences	87
22	Paragraphs	21
7	Long Sentences > 30 words	4
37	Short Sentences < 14 words	37
18.2	Words per sentence	17.4
3.8	Sentences per paragraph	4.1
52	Maximum words/sentence	49
51.2	Flesch reading index	34
--	Richardeau-Flesch reading index (French only)	51

Inforum / Inforum -- Winter/Spring 1994 -- Feature Article		
English text (original) VI-1-c.E		French text (translation) VI-1-c.F
<i>"CEO gives first departmental address to IS"</i>		<i>"Première rencontre du pdg et des SI"</i>
345	Words	384
17	Sentences	18
4	Paragraphs	4
3	Long Sentences > 30 words	3
5	Short Sentences < 14 words	5
20.3	Words per sentence	21.3
4.3	Sentences per paragraph	4.5
51	Maximum words/sentence	41
62.7	Flesch reading index	43
--	Richardeau-Flesch reading index (French only)	64.5

Inforum / Inforum -- Spring/Summer 1994 -- Management Column		
English text (original) VI-2-a.E		French text (translation) VI-2-a.F
<i>"Tête-à-tête with our VP"</i>		<i>"Nouvelles de la vice-présidence"</i>
734	Words	717
36	Sentences	37
8	Paragraphs	9
4	Long Sentences > 30 words	4
10	Short Sentences < 14 words	10
20.4	Words per sentence	19.4
4.5	Sentences per paragraph	4.1
70	Maximum words/sentence	59
61.1	Flesch reading index	35
--	Richardeau-Flesch reading index (French only)	52.5

Inforum / Inforum – Spring/Summer 1994 – Feature Article		
English text (original) VI-2-c.E		French text (translation) VI-2-c.F
<i>“New director takes on the telecommunications challenge”</i>		<i>“Un nouveau directeur relève le défi des télécommunications”</i>
2236	Words	2404
145	Sentences	155
32	Paragraphs	32
4	Long Sentences > 30 words	13
71	Short Sentences < 14 words	86
15.4	Words per sentence	15.5
4.5	Sentences per paragraph	4.8
61	Maximum words/sentence	56
56.9	Flesch reading index	41
--	Richardeau-Flesch reading index (French only)	61.5

APPENDIX V

Elements Identified in Corpus Analysis

I. CONTENT

1. Addition
2. Change in tone - more negative
3. Change in tone - more positive
4. Clarification added
5. Correction made in content
6. Error made in content
7. Honorific added
8. Honorific deleted
9. Mistranslation
10. Omission
11. Translation less specific
12. Translation more specific
13. Translation stronger
14. Translation weaker

II. STYLE

1. Change in point of view
2. Emphasis added
3. Emphasis deleted
4. Image added
5. Image deleted
6. Inconsistency - use of nonsexist language
7. Nonsexist usage added
8. Repetition added
9. Repetition deleted
10. Style less formal
11. Style more formal
12. Word play added
13. Word play deleted

III. READABILITY

1. Translation clearer
2. Translation less clear
3. Translation wordy
4. Translation more concise

IV. STRUCTURE

1. Agent added
2. Agent changed
3. Agent removed
4. Awkward structure
5. Change in order
6. Change in person - 1st to 3rd
7. Change in person - 2nd to 1st
8. Change in person - 1st to 2nd
9. Change in person - 2nd to 3rd
10. Change in person - 3rd to 1st
11. Grammar mistake
12. Paragraph broken up
13. Paragraphs combined
14. Paragraph moved
15. Quote used as statement
16. Statement used as a quote

V. TERMINOLOGY

1. Company jargon not used
2. Complicated terminology used
3. Business jargon not used
4. Specialized railway terminology added
5. Specialized railway terminology not used

APPENDIX VI

Examples of Elements Identified in Corpus Analysis

The codes used for the analysis of the translations are provided below with explanations, when needed, and with examples.

I. CONTENT

1. **Addition**

Original (I-1-a.e): The past year has been both challenging and rewarding....

Translation (I-1-a.f): À plusieurs points de vue, 1993 a été une année à la fois difficile et gratifiante...

2. **Change in tone - more negative**

Original (I-1-c.e): Here's what we can do to solve your transportation requirements...

Translation (I-1-c.f): Voici comment nous comptons résoudre vos problèmes de transport...

3. **Change in tone - more positive**

Original:(I-3-a.e): Going beyond the classroom

Translation: (I-3-a.f): La formation continue : un gage de réussite

4. **Clarification added**

Original: (I-1-c.e): In fact, it may mean that we put in a warehouse so the customers can bring their product to the warehouse. And then ship it out by rail. It may mean an intermodal option instead of direct freight car service.

Translation (I-1-c.f): À vrai dire, on songe à créer des dépôts où les clients viendraient laisser leurs marchandises à expédier par rail, ou encore à recourir à une formule intermodale plutôt qu'à un régime de transport exclusivement ferroviaire.

5. **Correction made in content**

Original (I-1-a.e): ...My tests for any eventual merger agreement are that it must be in the best interests of CN, it must meet the needs of our customers and it must satisfy Canada's transportation needs. Even so, merger is not a foregone conclusion at this stage. There is a lot of work ahead yet. As well, several issues could be "deal breakers", once negotiations begin. But the above two tests absolutely must be met if we are to proceed with the merger...

Translation (I-1-a.f): Toute entente de fusion avec le Réseau CP Rail devra remplir les conditions suivantes : servir au mieux les intérêts du CN et satisfaire les besoins des clients ainsi que ceux du Canada en matière de transports. Mais la fusion n'est pas encore chose acquise. Il nous reste plusieurs étapes à franchir, et certaines questions pourraient bien faire avorter les négociations. Une chose est sûre cependant, la fusion ne pourra intervenir que si les conditions que je viens de mentionner sont remplies.

N.B.: the original lists three conditions and then refers to "two tests", while the translation merely refers to "les conditions".

6. **Error made in content**

Original: (I-3-c.e): However, he was optimistic that there would be improved representation at all levels in 1994, citing the increase of women in the succession plan for the top 60 positions, 31 women candidates (34 per cent of 94 total candidates) in the corporate general management development program, and new recruitment initiatives.

Translation: (I-3-c.f): Il a cité la participation accrue des femmes au programme de planification de la relève (les 60 plus hautes postes), de même que l'inscription de 31 femmes (34 pour cent des 91 candidatures) au Processus de perfectionnement en direction générale de l'entreprise, ainsi que de nouvelles initiatives en matière de recrutement.

7. **Honorific added**

Original: (I-4-c.e): The safety of employees, freight and equipment and the ability to provide consistent service to its customers are of great importance to CN. All of these are threatened by accidents and CN North America will continue to learn from experience, meeting new challenges as they arise, says McBain.

Translation: (I-4-c.f): «La sécurité du personnel, la protection des marchandises et du matériel ainsi que la fiabilité du service à la clientèle, revêtent une importance capitale pour le CN. A cet égard, les accidents constituent une menace et CN Amérique du Nord continuera à apprendre de ses expériences et à relever les défis qui se présentent,» ajoute M. McBain

8. **Honorific deleted**

Original (II-2-c.e): “The importance of safety to business success is emphasized through word and action whenever we gather people together to learn,” stresses Ms. Serfaty.

Translation (II-2-c.f): «Au seing de tous les groupes, nous faisons valoir, tant par les mots que par les actions, l’importance de la sécurité dans la réussite commercial du CN», affirme Sonia Serfaty.

9. **Mistranslation**

Original (I-1-c.e): Gerald Davies, CN’s new Senior VP - Marketing on employees, customers and growing the business...

Translation (I-1-c.f): Le tout nouveau premier vice-président du Marketing livre ses impressions sur la compagnie, sa clientèle et les moyens à mettre en oeuvre pour accroître son chiffre d’affaires...

Also:

Original (I-1-a.e): ...along with CP, we want to agree on a solution which strengthens us both to meet the dominant truck competition in the East...

Translation (I-1-a.f): ...Les deux réseau veulent la même chose: se donner les moyens de lutter efficacement contre la concurrence devastatrice du cammionage dans l’Est...

10. **Omission**

Original (I-1-a.e): The past year has been both challenging and rewarding, with a good amount of progress...

Translation (I-1-a.f): À plusieurs points de vue, 1993 a été une année à la fois difficile et gratifiante, et nous avons fait des progrès...

11. **Translation less specific**

Original (I-1-a.e): ...to meet the needs of shippers in both Eastern and Western Canada...

Translation (I-1-a.f): ...pour satisfaire aux exigences des expéditeurs dans tout le pays...

Original (I-1-c.e); ...People are interested and concerned about where the customer is going...

Translation (I-1-c.f): ... Nos employés pensent aux intérêts de leurs clients...

12. **Translation more specific**

Original (I-1-a.e): The past year has been both challenging and rewarding...

Translation (I-1-a.f): À plusieurs points de vue, 1993 a été une année à la fois difficile et gratifiante...

13. **Translation stronger**

Original (I-1-a.e): ...to seek solutions to the problem the railways face with their eastern networks...

Translation (I-1-a.f): ... en vue de trouver des solutions aux graves difficultés que les deux chemins de fer éprouvent...

14. **Translation weaker**

Original (I-1-a.e): But the progress achieved and the work underway will not be enough to deal with the overriding financial and competitive threats which face us...

Translation (I-1-a.f): Nous devons aller beaucoup plus loin pour venir à bout de nos difficultés financières et de la concurrence...

II. STYLE

1. Change in point of view

Original: (I-1-c.e): Our number one priority is understanding why we are here, and that's the customer. We also need to understand the need for financial viability.

Translation: (I-1-c.f): Nous devons tout d'abord amener nos gens à comprendre la raison d'être de la Compagnie, et cette raison d'être, c'est le client. Ensuite, il faut lui faire comprendre à quel point il est essentiel que la Compagnie soit viable sur le plan financier.

2. Emphasis added

Original: (I-1-c.e): I need to understand the people in our marketing group and the other members of the organization.

Translation: (I-1-c.f): Personnellement, j'ai encore beaucoup à apprendre sur le service du Marketing et les gens qui le composent.

3. Emphasis deleted

Original: (I-3-a.e): First it needs the willingness of each and every employee to accept the fact that change is inevitable, and to actively seek out training that will increase the knowledge and skills you require to keep up with the demands of the job.

Translation: (I-3-a.f): D'abord, les employés doivent reconnaître que le changement est inévitable et rechercher activement les programmes de formation qui viendront enrichir leurs connaissances et leurs compétences; ils sauront ainsi s'adapter aux nouvelles exigences de leur poste.

4 Image added

Original: (I-2-c.e): It's only through the combined efforts of all individuals within our organization working towards a common set of objectives that we will meet our customers' needs, provide excellent service, reduce our operating costs and improve overall performance.

Translation: (I-2-c.f): Pour arriver à satisfaire les besoins de notre clientèle, à fournir un excellent service, à réduire nos coûts d'exploitation et à améliorer notre rendement global, il faut que tous les membres de personnel tirent dans le même sens.

5. **Image deleted**

Original (I-1-c.e): ...People are interested and concerned about where the customer is going...

Translation (I-1-c.f); Nos employés pensent aux intérêts de leurs clients...

6. **Inconsistency - use of nonsexist language**

Original: (I-8-a.e): Account managers will not only be knowledgeable about our products and services, they will be entrepreneurs and problem solvers as well. The added benefit is that account managers....

Translation: (I-8-a.f): Les directeurs et directrices de comptes n'auront pas seulement une connaissance approfondie de leurs produits et services, mais ils assumeront également le rôle d'entrepreneurs, capables de résoudre tous les problèmes à mesure qu'ils se présentent. Ce faisant, les directeurs de compte...

7. **Nonsexist usage added**

Original: (I-4-a.e): Be it in an office location or on a safety-sensitive job, safety has to start with you. Our past records prove that we can operate safely.

Translation: (I-4-a.f): Peu importe où vous travaillez, dans un bureau ou dans une poste critique pour la sécurité, vous devez toujours être conscients et conscientes de l'importance d'être vigilants. Nous avons prouvé, par le passé, que nous pouvons exercer nos activités en toute sécurité.

8. **Repetition added**

Original (I-1-a.e): ...to seek solutions to the problem the railways face with their eastern networks. Simply put, the problem is that our costs are too high...

Translation (I-1-a.f): ...en vue de trouver des solutions aux graves difficultés que les deux chemins de fer éprouvent dans l'Est du Canada. Nos coûts dans cette région sont tout simplement trop élevés...

9. **Repetition deleted**

Original (I-1-a.e): ... to seek solutions to the problem the railways face with their eastern networks. Simply put, the problem is that our costs are too high...

Translation (I-1-a.f): ...en vue de trouver des solutions aux graves difficultés que les deux chemins de fer éprouvent dans l'Est du Canada. Nos coûts dans cette région sont tout simplement trop élevés...

10. **Style less formal**

Original: (I-2-a.e): It is therefore important that each of you understand clearly what is expected and participate in the objective setting process.

Translation: (I-2-a.f): Il est donc impératif que chaque membre du personnel comprenne bien ce que l'on attend de lui et qu'il sente qu'il joue un rôle dans l'établissement de ses objectifs.

Original: (I-2-a.e): I believe it is essential that employees have the opportunity to not only be involved in objective-setting, but that they have an opportunity to provide their managers with an assessment of how well they are managing their subordinates.

Translation (I-2-a.f): Il est essentiel, selon moi, que le personnel participe à l'établissement de ses objectifs, mais aussi qu'il puisse informer ses chefs hiérarchiques de ce qu'il pense de leur style de gestion.

11 **Style more formal**

Original (I-1-a.e): I am pleased with a growing attitude among the employees I have spoken with about their understanding of the tough situation CN faces, and their desire to "get on with it"...

Translation (I-1-a.f): Il m'est rassurant de voir que les employés sont de plus en plus conscients de la gravité de la situation et qu'ils sont prêts à faire ce qu'il faut pour sortir le CN de ce mauvais pas...

12. **Word play added**

Original: (I-2-c.e): It's an idea, according to Grand Trunk director Quality Kim Krikau, whose idea has come.

Translation: (I-2-c.f): C'est une idée qui a fait son chemin, estime Kim Krikau, directeur de la Qualité au Grand Truck.

13. **Word play deleted**

Original (I-1-c.e): ...People are interested and concerned about where the customer is going...

Translation (I-1-c.f): ...Nos employés pensent aux intérêts de leurs clients...

III. READABILITY

1. **Translation clearer**

Original (I-1-c.e): ...and insure that where we take our capabilities is for our customers' success in the late 90s...

Translation (I-1-c.f): ...pour que, d'ici à la fin de la décennie, tous ses gestes concourent à la réussite de ses clients...

2. **Translation less clear**

Original (I-1-c.e): some of our industries are going to have a tougher time competing. Some of them will compete very effectively. And some of them are going to be exceptionally competitive.

Translation (I-1-c.f): Certaines auront plus mal à tirer leur épingle du jeu, alors que d'autres y excelleront.

3. **Translation more concise**

Original: (I-2-a.e): It's only through the combined efforts of all individuals within our organization working towards a common set of objectives that we will meet our customers' needs, provide excellent service, reduce our operating costs and improve overall performance.

Translation: (I-2-a.f): Pour arriver à satisfaire les besoins de notre clientèle, à fournir un excellent service, à réduire nos coûts d'exploitation et à améliorer notre rendement global, il faut que tous les membres du personnel tournent dans le même sens.

4. **Translation wordy**

Original (I-1-c.e): Gerald Davies, CN's new Senior VP - Marketing on employees, customers and growing the business.

Translation (I-1-c.f): Le tout nouveau premier vice-président du Marketing et les moyens à mettre en oeuvre pour accroître son chiffre d'affaires.

IV. STRUCTURE

1. **Agent added**

Original (I-1-a.e): the past year has been both challenging and rewarding, with a good amount of progress...

Translation (I-1-a.f): À plusieurs points de vue, 1993 a été une année à la fois difficile et gratifiante, et nous avons faits des progrès...

2. **Agent changed**

Original (I-1-c.e): Our number one priority is understanding why we are here, and that's the customer. We also need to understand the need for financial viability.

Translation (I-1-c.f): Nous devons tout d'abord amener nos gens à comprendre la raison d'être de la Compagnie, et cette raison d'être, c'est le client. Ensuite, il faut lui faire comprendre à quel point il est essentiel que la Compagnie soit viable sur le plan financier.

3. **Agent removed**

Original (I-1-a.e): Simply put, the problem is that our costs are too high for the business we are able to attract...

Translation (I-1-a.f): Nos coûts dans cette région sont tout simplement trop élevés pour le trafic disponible...

4. **Awkward structure**

Original (V-2-a.f): Notre mission est d'être la première entreprise multinationale de reconstruction et remise à neuf du matériel roulant.

Translation (V-2-a.e): Becoming the #1 multinational in manufacturing and remanufacturing transportation systems is the mission we have adopted.

5. **Change in order**

Original (III-5-c.e): On May 3, CN North America and Maritime Ontario Freight Lines Limited announced a long-term partnership agreement to haul traffic between Central Canada and the Maritimes.

Translation (III-5-c.f): Maritime-Ontario Freight Lines et CN Amérique du Nord ont annoncée, le 3 mai, la conclusion d'une alliance à long terme concernant le transport des marchandises entre le centre du pays et les Maritimes.

6. **Change in person - 1st to 2nd**

Original (VI-2-c.e): If you say that in 3, 6, 9 months I will be delivering x number of millions of dollars in savings and that I will be delivering infrastructures that will evolve so that the business will be much better, be it marketing or the actual operation of the railwad, obviously people will give you the change.

Translation (VU-2-c.f): Si vous dites que dans trois mois, six mois ou neuf mois, vous aurez réalisé des économies de tant de millions de dollars et que vous aurez mis sur pied des infrastructures évolutives afin que l'entreprise fonctionne mieux, que ce soit au marketing ou à l'exploitation du chemin de fer, on vous donnera évidemment une chance.

7. **Change in person - 1st to 3rd**

Original: (I-1-c.e): In Marketing, we have to begin to play our role in shaping the direction of the organization and insure that where we take our capabilities is for our customers' success in the late 90s.

Translation: (I-1-c.f): Le service du Marketing doit jouer pleinement son rôle et orienter l'action de la compagnie pour que, d'ici à la fin de la décennie, tous ses gestes concourent à la réussite de ses clients.

8. **Change in person - 2nd to 1st**

Original (I-1-c.e): You need to understand the marketplace you are playing in, what our customers have to do in the marketplace, and what our competitors are doing...

Translation (I-1-c.f): Il nous faut mieux comprendre les règles du jeu et ce que nos clients doivent faire pour rester dans le jeu, tout en gardant à l'oeil nos propres concurrents...

9. **Change in person - 2nd to 3rd**

Original: (I-2-a.e): It is therefore important that each of you understand clearly what is expected and participate in the objective setting process.

Translation: (I-2-a.f): Il est donc impératif que chaque membre du personnel comprenne bien ce qu'on attend de lui et qu'il sente qu'il joue un rôle dans l'établissement de ses objectifs.

10. **Change in person - 3rd to 1st**

Original: (I-5-c.e): Sometimes competitors are customers...

Translation: (I-5-c.f): Nos concurrents sont parfois nos clients.

11. **Grammar mistake**

Original (I-1-c.e): Our number one priority is understanding why we are here, and that's the customer. We also need to understand the need for financial viability.

Translation (I-1-c.f): Nous devons tout d'abord amener nos gens à comprendre la raison d'être de la Compagnie, et cette raison d'être, c'est le client. Ensuite, il faut lui faire comprendre à quel point il est essentiel que la Compagnie soit viable sur le plan financier.

12. **Paragraph broken up**

Original (I-1-c-e): Once we know the answers to these questions, we then need to describe to our operations group what kind of service we need, where we need it, what it must look like. Service is all we've got to sell. Our schedules are based on some sense of what's happening in the marketplace and with our customers. We've been reactive in responding to their transportation needs. But it's not the result of us describing to the operations group when kind of service is needed for the marketplace. We've got to be able to do that in order to grow the business. And we've got to do it better than we do it today. We will not be able to compete in the marketplace with our existing cost structure. It won't work. We've got to be able to provide those services more effectively and at a lower cost than we do today.

Translation (I-1-c-f): Ensuite, quand on sait où l'on se situe, on doit se retourner et expliquer aux gens de l'Exploitation le genre de service dont on a besoin, quand on en a besoin et en quoi ce service doit consister précisément. Parce qu'au fond, ce qu'une compagnie comme la notre a à proposer, ce sont des services.

Nos horaires de trains reposent sur une certaine connaissance des attentes du marché. Jusqu'à présent nous nous sommes contentés de réagir aux demandes de nos clients, alors que nous aurions dû expliquer au groupe de l'Exploitation le type de service recherché sur le marché, car c'est justement ce qu'il faudrait faire pour augmenter notre clientèle - et que nous aurions intérêt à faire mieux que maintenant.

Nous n'arriverons jamais à soutenir la concurrence avec nos coûts actuels. C'est impensable. Non seulement nos services doivent être plus efficaces, mais ils doivent aussi coûter moins cher qu'en ce moment.

13. **Paragraphs combined**

Original: (I-2-a.e): Performance management is a two-way street. It opens the door for employees to have input in developing their objectives and ways of achieving them.

It's also upward feedback. Supervisors must foster a climate where involvement, empowerment and supportive coaching are the norm, enabling employees to solve problems that might otherwise not get done. It's a cultural change that clearly has to happen at all levels of the organization.

Translation: (I-2-a.f): La gestion du rendement ne se fait pas à sens unique. Elle donne au personnel l'occasion de participer à l'élaboration de ses objectifs individuels et à la définition des moyens pour les atteindre. La gestion du rendement doit s'occuper également de rétroaction ascendante. Le personnel de supervision doit favoriser un climat où règne la participation, la responsabilisation et un encadrement enrichissement; un climat dans lequel le personnel est habilité à résoudre des problèmes qui autrement

resteraient sans solution. Il s'agit là d'un changement culturel qui doit, cela va de soi se produire à tous les échelons de l'organisation.

14. **Paragraph moved**

Original (II-2-c.e): "This is part of Operations Training's commitment to working safely and supporting the efforts of Safety and Loss Control," says Mr. Patterson.

In addition to developing its own courses, Operations Training also relies on training provided by local technical colleges and CEGEPS wherever possible. "We don't believe in reinventing the wheel," says Mr. Patterson. "If we can get the training from outside, we don't duplicate the work."

Different Levels

Training covers skills at different levels, from that required by an apprentice or a newly-hired employee to the advanced knowledge required by supervisors and mature employees seeking to qualify for more highly-skilled positions.

Translation (II-2-c.f): Comme le souligne Mr. Patterson, «cela fait partie de l'engagement que la formation exploitation a pris en matière de sécurité au travail et ses efforts déployés à cet égard par le service Sécurité et contrôle des pertes.»

L'élaboration des cours est une tâche perpétuelle puisque la matière doit être constamment actualisée afin de tenir compte des nouvelles techniques. «Quand un nouveau cours est mis au point, nous le validons par un essai-pilot pour s'assurer qu'il se comprend bien avant de le diffuser.»

Des cours à tous les niveaux

La Formation exploitation se prévaut aussi de la formation offerte par les collèges techniques et les cégeps chaque fois que cela est possible. «Nous ne cherchons pas à réinventer la roue. Ce serait un doublement d'efforts inutile que de ne pas tirer profit des cours qui se donnent à l'extérieur», dit-il.

La formation s'adresse à tous les niveaux des aptitudes de base que nécessitent les apprentis ou les personnes fraîchement embauchées, aux connaissances approfondies dont ont besoin les superviseurs et les personnes d'expériences pour gravir les échelons dans la Compagnie.

15. **Quote used as statement**

Original: (I-7-c.e): According to Dan LeBlanc, the customers are already biting.

Translation: (I-7-c.f): Et les clients cognent déjà à la porte.

16. **Statement used as a quote**

Original: (I-8-c.e): In a commitment to CN employees, Mr. Tellier has promised that if financial results continue to reflect positive growth throughout the remainder of 1994, a payment will be awarded to non-schedule and management employees at year end in an effort "to recognize your outstanding efforts and contribution in a tangible way," he acknowledged.

Translation: (I-8-c.f): Toutefois, M. Tellier ne veut pas attendre tout une année pour reconnaître la contribution du personnel. «Si nos résultats financiers poursuivent leur remontée, nous accorderons dès la fin de l'année 1994 une prime à tous les membres du personnel cadre et non syndiqué,» a-t-il déclaré.

V. TERMINOLOGY

1. **Business jargon not used**

Original (I-2-c.e): "One thing it's going to take is leadership, where the leaders, to use a bromide, walk the talk. Vice-President Corporate Bob Walker and Dave Wilson, Vice-President of U.S. Operations, are sold on this concept. My role is to keep them wired to continue walking the talk."

Translation «Mais le succès de ce programme réside dans le leadership que nous exercerons. Bob Walker, vice-président général, et Dave Wilson, vice-président Exploitation des lignes américains, donnent leur entière adhésion au projet. Mon rôle est de les tenir sans cesse au courant pour obtenir leur soutien et leur leadership.»

2. **Company jargon not used**

Original: 1. (I-2-c.e): Recruited from Burlington Northern in the US, CN's new senior vice-president - Marketing, Gerald Davies, has been made personally responsible for growing the business.

2. (I-2-c.e): Gerald Davies, CN's new senior vp - Marketing, on employees, customers and growing the business.

Translation: 1. (I-2-c.e): Gerald Davies nous vient du Burlington Northern. Son mandat à titre de premier vice-président du Marketing est simple: accroître la clientèle de la Compagnie.

2. (I-2-c.f): Le tout nouveau premier vice-président du Marketing livre ses impressions sur la Compagnie, sa clientèle et les moyens à mettre en oeuvre pour accroître son chiffre d'affaires.

Note: The company jargon was used twice in close proximity in the original English version and translated in two different ways.

3. **Complicated terminology used**

Original: (I-6-c.e): "Process improvement attempts to coordinate the work at all levels to ensure the best possible overall operation of a system," says Rand Ayers, director - Process Quality, Quality and Human Resources.

Translation: (I-6-c.f): «L'amélioration de processus, répond Rand Ayers, directeur, Qualité des processus de travail au service Qualité et ressources humaines, vise à coordonner l'intervention à tous les niveaux, afin d'optimiser le fonctionnement du système dans son ensemble.»

4 **Specialized railway terminology added**

Original: (I-5-c.e): The train emerges and heads over CN Tracks to Talbotville where it will haul away automobiles from the Ford automotive plant.

Translation: (I-5-c.f): Le train qui émerge empruntera les lignes du CN à destination de l'usine Ford de Talbotville où il prendra en charge des wagons porte-automobiles.

5. **Specialized railway terminology not used**

Original: (I-2-c.e): Under the program, Grand Trunk brings loaded rack cars from the three Michigan cities to Chicago before handing them off to an intermediary beltway operation.

Translation: (I-2-c.e): En vertu de ce programme, le Grand Trunk achemine les wagons chargés depuis trois villes du Michigan jusqu'à Chicago où ils les remet à un chemin de fer intermédiaire.

APPENDIX VII

Copies of *Keeping Track* / *Au fil du rail* articles

Changing for the better

The past year has been both challenging and rewarding, with a good amount of progress. I am pleased with a growing attitude among the employees I have spoken with about their understanding of the tough situation CN faces, and their desire to "get on with it."

But the progress achieved and the work underway will not be enough to deal with the overriding financial and competitive threats which face us. The company must be strengthened in these two areas. To survive the long term, we must implement radical change for the betterment of CN.

In late December I publicly reported on the progress of talks begun a year earlier with CP Rail System to seek solutions to the problem the railways face with their Eastern networks. Simply put, the problem is that our costs are too high for the business we are able to attract.

As a result, we have been looking at ways to make Eastern rail service more efficient and competitive. Our studies to date indicate that a merger of the two companies and their facilities in the East appears to be the best option to create a rail service which can support itself and meet fully the needs of our customers.

Continued financial losses and the need for future capital are driving us to find a solution. As you now know, both companies have lost close to \$2.0 billion in the East over the last five years and this simply cannot continue.

We need a blueprint for railway survival in the East which ensures that the rail industry has the competitive ability and the financial strength to meet the needs of shippers in both Eastern and Western Canada. Along with CP, we want to agree on a solution which strengthens us both to meet the dominant truck competition in the East. And we want to design our own solution as to what is best for our industry, rather than go our separate ways, or risk having a solution imposed on us. It is in no one's interest for Canada's railways to go through the same bitter and acrimonious process as the airline industry has recently experienced.

I know that the merger issue has caused concern among our employees and pensioners, and I regret that. Let me assure you that as we review the issue, CN brings considerable strength to the discussion table. Relatively speaking, CN is in a very strong position in the East. My tests for any eventual merger agreement are that it must be in the best interests of CN, it must meet the needs of our customers and it must satisfy Canada's transportation needs.

Even so, merger is not a foregone conclusion at this stage. There is a lot of work ahead yet. As well, several issues could be "deal breakers," once negotiations begin. But the above two tests absolutely must be met if we are to proceed with the merger.

I have not come to this point to preside over the end of the railways in Eastern Canada. I want to see them strengthened in an orderly way, re-shaped to thrive in the Eastern marketplace. We believe there are good prospects for business growth in the East, but there is simply not enough business to sustain the huge burden of track, facilities and costs which both companies now carry.

While our operations in Western Canada are not directly involved, the situation in the East does have ramifications for the West, where both railways face growing competitive pressures, particularly with regard to pricing. The West cannot sustain the East. And for the two railways to be successful in the West, they and their shippers need an efficient and competitive rail network in Eastern Canada.

Let me leave two final points with you on this issue. The first is to assure the 50,000 CN pensioners and their survivors who read *KEEPING TRACK*, along with our employees, that this process does not imperil the CN Pension Trust Fund. The assets of that Fund are completely separate from CN's assets and are administered in accordance with the terms of the CN Pension Plan and the provisions of the federal Pension Benefits Standards Act, 1985. In addition, legal title to the assets of the CN Pension Trust Fund are held by the trustee of the Fund, the Montreal Trust Company of Canada.

Finally, I want to repeat to all employees, that whatever the outcome of our discussions with CP Rail System, CN has to continue with the program of cost reduction and revenue enhancement we now have underway. Our rationalization efforts must continue if we are to improve our competitive ability. At the same time we will be pursuing ambitious marketing objectives to improve our revenue situation. Integral to both of these strategies is the need to strike a new relationship with labor. It will allow us to become more productive and competitive, to the advantage of all who work in the rail industry. I will say more about this on another occasion.

Changer pour le mieux

À plusieurs points de vue, 1993 a été une année à la fois difficile et gratifiante, et nous avons fait des progrès. Il m'est rassurant de voir que les employés sont de plus en plus conscients de la gravité de la situation et qu'ils sont prêts à faire ce qu'il faut pour sortir le CN de ce mauvais pas.

Mais les progrès que nous avons réalisés restent nettement insuffisants. Nous devons aller beaucoup plus loin pour venir à bout de nos difficultés financières et de la concurrence. Notre situation demeure critique et, pour assurer notre survie à long terme, nous devons prendre des moyens radicaux.

À la fin de décembre, j'ai fait publiquement état de l'avancement des pourparlers qui ont été amorcés il y a un an avec le Réseau CP Rail en vue de trouver des solutions aux graves difficultés que les deux chemins de fer éprouvent dans l'Est du Canada. Nos coûts dans cette région sont tout simplement trop élevés pour le trafic disponible.

Nous nous sommes donc mis à la recherche de solutions pour rendre notre service ferroviaire dans l'Est beaucoup plus efficace et concurrentiel. Selon nos études, la meilleure garantie de survie réside dans la fusion des deux entreprises et de leurs installations dans l'Est, afin de bâtir un réseau capable de s'autofinancer et de satisfaire pleinement les besoins de la clientèle.

Nous devons absolument trouver le moyen de mettre un terme aux pertes financières et d'aller chercher les capitaux nécessaires pour assurer l'avenir. En cinq ans, le CN et le CP ont perdu ensemble près de 2 milliards de dollars dans cette partie du pays ; nous ne pouvons plus continuer ainsi.

Nous devons préparer un plan de survie du rail dans l'Est ; un plan qui donnera aux chemins de fer à la fois la compétitivité et la force financière nécessaires pour satisfaire aux exigences des expéditeurs dans tout le pays. Les deux réseaux veulent la même chose : se donner les moyens de lutter efficacement contre la concurrence dévastatrice du camionnage dans l'Est. Et pour le bien de notre industrie, nous voulons déterminer nous-mêmes, et ensemble, ces moyens et solutions, plutôt que de risquer de nous les faire imposer. Personne n'a intérêt à voir les chemins de fer canadiens répéter l'expérience amère et douloureuse qu'a connue récemment l'industrie aérienne.

La question de la fusion a causé beaucoup d'inquiétude parmi le personnel et les personnes retraitées, et j'en suis désolé. Mais sachez toutefois que le CN a un sérieux avantage à la table des pourparlers, car tout bien considéré, nous sommes en position de force dans l'Est. Toute entente de fusion avec le Réseau CP Rail devra remplir les conditions suivantes : servir au mieux les intérêts du CN et satisfaire les besoins des clients ainsi que ceux du Canada en matière de transports.

Mais la fusion n'est pas encore chose acquise. Il nous reste plusieurs étapes à franchir, et certaines questions pourraient bien faire «avorter» les négociations. Une chose est sûre cependant, la fusion ne pourra intervenir que si les conditions que je viens de mentionner sont remplies.

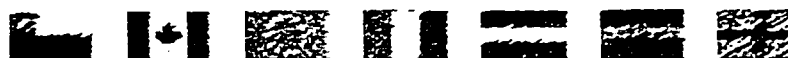
Je ne suis pas ici pour présider à la disparition des chemins de fer dans l'Est du Canada. Au contraire. Je veux qu'ils reprennent des forces afin qu'une fois remodelés, ils puissent survivre et prospérer dans l'Est. Il existe d'excellentes occasions d'affaires dans l'Est, mais pas assez pour justifier l'imposante infrastructure et l'énorme fardeau financier que les deux entreprises doivent supporter à l'heure actuelle.

Sans être directement en cause, nos activités dans l'Ouest canadien subissent le contre-coup de la situation dans l'Est. Dans l'Ouest, les deux réseaux sont soumis à de fortes pressions concurrentielles qui ont un effet à la baisse sur les prix ; cette région ne peut donc pas servir de béquille à l'Est. Par ailleurs, pour vivre prospères dans l'Ouest, les deux transporteurs doivent pouvoir compter sur un réseau ferroviaire efficace et concurrentiel dans le reste du pays.

En terminant, je voudrais aborder deux autres points très importants. Que les bénéficiaires de rente du CN et membres du personnel actif se rassurent : ces démarches ne constituent en aucun cas une menace pour la Caisse fiduciaire de retraite du CN. Les actifs de la Caisse sont tout à fait distincts de ceux du CN et ils sont gérés conformément aux dispositions du Régime de retraite du CN et de la Loi de 1985 sur les normes de prestation de pension. En outre, c'est la société Montréal Trust du Canada qui, à titre de fiduciaire, détient les titres légaux des actifs de la Caisse.

À tous les membres du personnel, je tiens à préciser de nouveau que, quelle que soit l'issue des pourparlers avec le CP, le CN poursuivra son programme de réduction des coûts et de relèvement des recettes. Nous ne redeviendrons concurrentiels qu'au prix d'importants efforts de rationalisation. Parallèlement, nous mettrons en oeuvre de nouvelles stratégies commerciales pour augmenter notre chiffre d'affaires. Mais le succès de ces démarches repose sur l'établissement d'un nouveau partenariat avec les syndicats — un partenariat qui nous permettra de devenir plus productif et concurrentiel, pour le bien de tous les travailleurs de l'industrie. Je vous en reparlerai très bientôt.

OUT TO WIN



*Gerald Davies, CN's new senior vp - Marketing,
on employees, customers and growing the business*

Recruited from Burlington Northern in the US, CN's new senior vice-president - Marketing, Gerald Davies has been made personally responsible for growing the business. That's no easy task considering the economy, the marketplace and the competition.

Davies likes to win. He's hell bent on making CN profitable. KEEPING TRACK met with him in mid-December to discuss his views on what CN must do to attract more business and revenue and what his focus will be in the coming months.

On first impressions...

The execution of our services is not what it should be. People are interested and concerned about where the customer is going, but the organization on a whole is not well focused on the customer. In Marketing, we have to begin to play our role in shaping the direction of the organization and ensure that where we take our capabilities is for our customers' success in the late 90's.

On his priorities...

We have to understand our customer base - their competitive environment, the challenges in their marketplace. We need to hear their views on our strengths and weaknesses.

I need to understand the people in our Marketing group and the other members of the organization. I am meeting with as many of our people as possible to hear them out and to understand what they think we have to be focused on. We've got to work closely together for us to be successful.

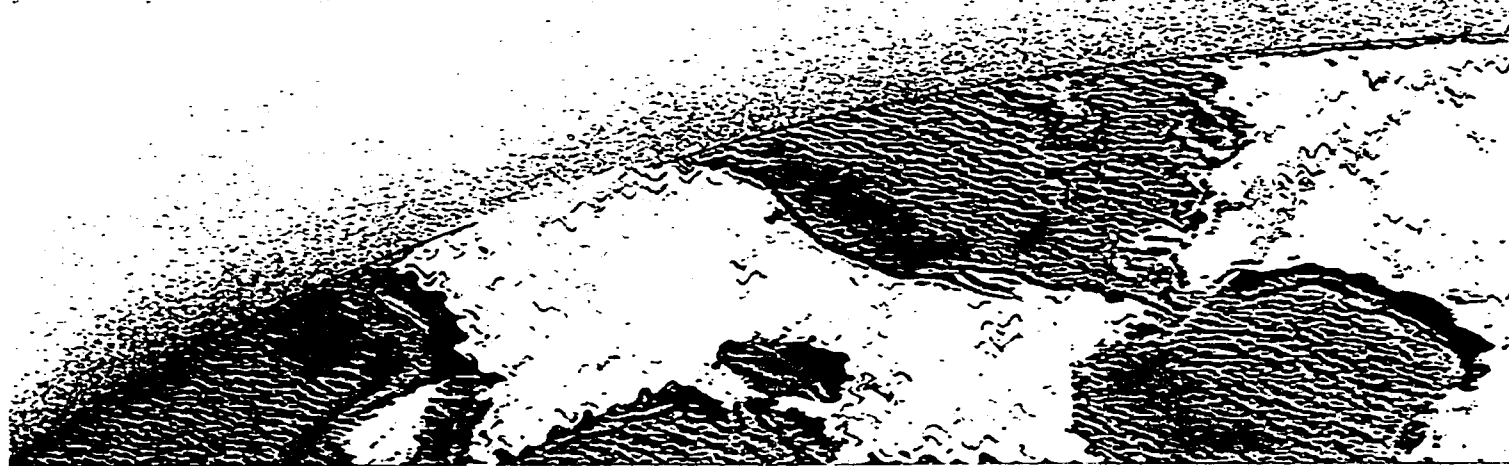
On growing the business...

Customers are always changing to meet the demands of their customers. What we have to do is anticipate where our customers are going to be, and be there either with them, or slightly ahead of them. We should be in a position where we say, "Here's what we can do to solve your transportation requirements, how we can add value to your product line."

We have to understand what they're dealing with. Take the coal industry for example. We need to know not only what's happening in coal moving from north western Alberta to Prince Rupert or to Vancouver, but what's happening to the demand for coal in Japan as well. How are the Australians producing coal? What's going on in South Africa? You need to understand the marketplace you're playing in, what our customers have to do in that marketplace, and what our competitors are doing.



There is only one reason why we come to work every day. That's the customer. We have to make sure that what we do is adding value to our customers. If it's not, why are we coming to work?





Once we know the answers to those questions, we then need to describe to our Operations group what kind of service we need, where we need it, what it must look like. Service is all we've got to sell.

Our schedules are based on some sense of what's happening in the marketplace and with our customers. We've been reactive in responding to their transportation needs. But it's not the result of us describing to the Operations group what kind of service is needed for the marketplace. We've got to be able to do that in order to grow the business. And we've got to do it better than we do it today.

We will not be able to compete in the marketplace with our existing cost structure. It won't work. We've got to be able to provide those services more effectively and at a lower cost than we do today.

On our people...

Our number one priority is understanding why we are here, and that's the customer. We also need to understand the need for financial viability. We have to generate net income so that we can provide new services and the capabilities that our customers require to be competitive.



We all have a stake in our success.

We need people who specialize in what is happening in the marketplace. We are not organized that way. If we are going to be a world class organization, what kind of capabilities must we exhibit? We have to reinforce the things we are doing well, and take the things we are screwing up, straighten them up and make them right. And we are going to wrestle through that as fast as we can. But it's more important that we do it right than do it fast. I'm looking to getting action plans defined by the end of the first quarter of '94.

On new markets...

Intermodal is our fastest growing market mainly because the quality of our services has improved dramatically in recent years. We have proven we can provide quality service and we are getting that recognition from other carriers, such as J.B. Hunt.



We really haven't tackled the medium haul market. There's a lot of business there that we could have on our railway. We don't do well on the medium and short haul market. Our internal costs are high; we're not very competitive. Our services aren't bad but our costs are out of whack.

We are improving now with smaller train crews but we've got to get those train costs down further.

On NAFTA...

NAFTA is simply a recognition of a change that was already there. The economics of our continent were driving Mexico, the US and Canada together into a cohesive market regardless.

NAFTA will make the north-south traffic flows on our system more important than they have been in the past. Some of our industries are going to have a tougher time competing. Some of them will compete very effectively. And some of them are going to be exceptionally competitive. We'll share in that because flows are going to get longer and denser as a result of this change towards a North American economic unit.

On our future...

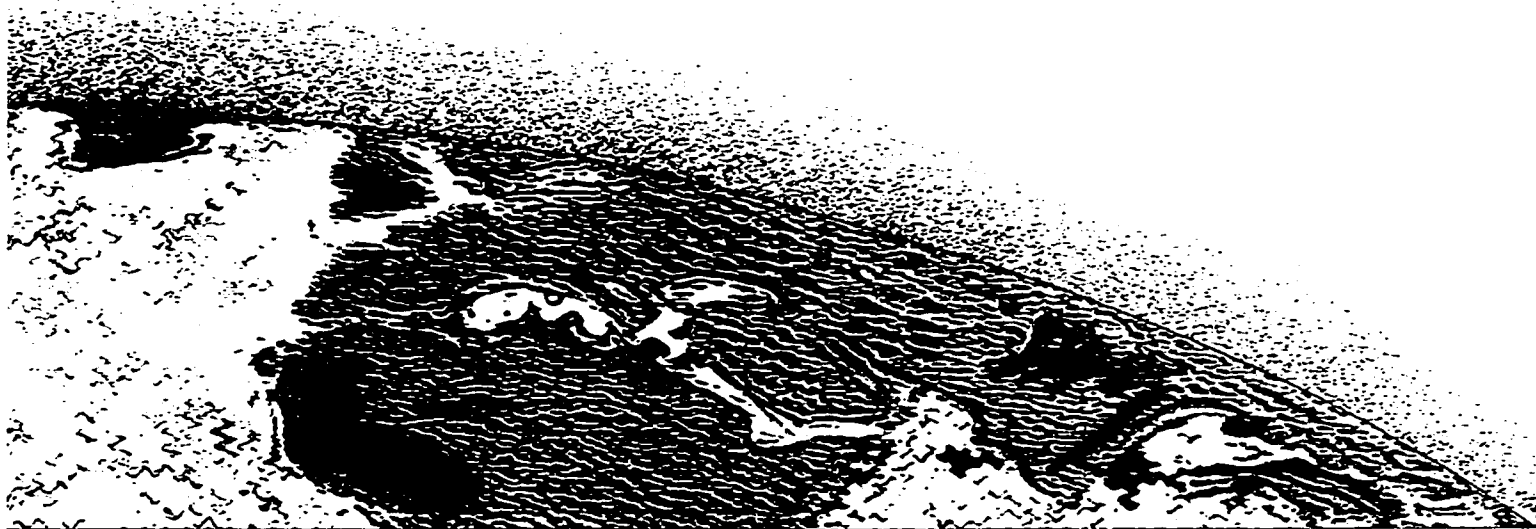
Our network will not be the same as it is today. There are some lines out there that don't have enough traffic. We can't keep providing rail service everywhere. In fact, it may mean that we put in a warehouse so the customer can bring their product to that warehouse and then ship it out by rail. It may mean an Intermodal option instead of direct freight car service.

Those are the kinds of options that you have to go through as you look at specific situations and understand — is there a way we can meet that customer's requirements and earn a buck doing it. If we can't earn a buck, we won't be there.



On his message to employees...

Let's be world class. I like to win. I do things to win. In this business, that means meeting your customer's needs better than anybody else and in doing so you leave more on the bottom line than anybody else does. We have to ensure that all of our capabilities are at the world class level. Get out in the marketplace and let's be the winner. I want CN to be the long-term survivor.



FAIRE CE QU'IL FAUT POUR GAGNER

Le tout nouveau premier vice-président du Marketing livre ses impressions sur la Compagnie, sa clientèle et les moyens à mettre en oeuvre pour accroître son chiffre d'affaires

Gerald Davies nous vient du Burlington Northien. Son mandat à titre de premier vice-président du Marketing est simple : accroître la clientèle de la Compagnie, ce qui n'est pas peu dire quand on connaît le contexte économique, la concurrence et le marche avec lesquels elle doit composer.

M. Davies est un gagneur. Il veut à tout prix ramener le CN sur le chemin de la rentabilité. Au fil du rail, l'a rencontré à la mi-décembre pour recueillir ses impressions sur ce que le CN doit accomplir, à son avis, pour augmenter son chiffre d'affaires, et sur les directions qu'il entend prendre au cours des prochains mois.

Premières impressions...

Au CN, le service n'est pas tout ce qu'il pourrait être. Individuellement, nos employés pensent aux intérêts de leurs clients, mais, globalement, l'entreprise n'est pas entièrement axée sur eux. Le service du Marketing doit jouer pleinement son rôle et orienter l'action de la Compagnie pour que, d'ici à la fin de la décennie, tous ses gestes concourent à la réussite de ses clients.

À propos des priorités...

Nous devons comprendre parfaitement le contexte dans lequel nos clients évoluent, que ce soient leurs concurrents ou les fluctuations de leurs marchés, et ne pas avoir peur en retour de ce qu'ils pensent de nous, que ce soit en bien ou en mal.

Personnellement, j'ai encore beaucoup à apprendre sur le service du Marketing et les gens qui le composent. J'essaie de rencontrer le plus grand nombre de nos employés possible pour écouter les pistes que nous aurons intérêt à suivre selon eux. Pour réussir, nous devons apprendre à serrer les rangs.

À propos de la clientèle et des moyens de l'accroître...

Nos clients changent constamment pour s'adapter à leurs propres clients. Il nous faut donc dégager chez eux les grandes tendances qui se dessinent et les accompagner dans leur cheminement, quitte même à anticiper et à les devancer un peu. Nous devons pouvoir leur dire : «Voici comment nous corrigeons résoudre vos problèmes de transport et comment nous aiderons de la valeur à vos produits.»

Il faut se mettre à leur place. Prenons l'industrie du charbon. Nous devons non seulement savoir ce qui se passe du côté de l'offre, dans les transports à partir du nord-ouest de l'Alberta jusqu'à Prince Rupert ou Vancouver, ou sur le plan de la production en Australie ou en Afrique du Sud, mais aussi ce qui se passe du côté de la demande, notamment en provenance du Japon. Il nous faut mieux comprendre les règles du jeu et ce que nos clients doivent faire pour rester dans le jeu, tout en gardant à l'oeil nos propres concurrents.



Il n'y a qu'une raison pour venir au travail chaque matin : c'est le client. Chacun de nos gestes doit ajouter de la valeur à son produit. Sinon, à quoi bon venir travailler ?





Ensuite, quand on sait où l'on se situe, on doit se retourner et expliquer aux gens de l'Exploitation le genre de service dont on a besoin, quand on en a besoin et en quoi ce service doit consister précisément. Parce qu'au fond, ce qu'une compagnie comme la nôtre a à proposer, ce sont des services.

Nos horaires de trains reposent sur une certaine connaissance des attentes du marché. Jusqu'à présent nous nous sommes contentés de réagir aux demandes de nos clients, alors que nous aurions dû expliquer au groupe de l'Exploitation le type de service recherché sur le marché, car c'est justement ce qu'il faudrait faire pour augmenter notre clientèle – et que nous aurions intérêt à faire mieux que maintenant.

Nous n'arriverons jamais à soutenir la concurrence avec nos coûts actuels. C'est impensable. Non seulement nos services doivent être plus efficaces, mais ils doivent aussi coûter moins cher qu'en ce moment.

À propos du personnel...

Nous devons tout d'abord amener nos gens à comprendre la raison d'être de la Compagnie, et cette raison d'être, c'est le client. Ensuite, il faut lui faire comprendre à quel point il est essentiel que la Compagnie soit viable sur le plan financier. Il faut absolument faire des profits pour pouvoir être en mesure de proposer à nos clients les services nouveaux et

améliorés dont ils ont besoin pour assurer leur propre compétitivité.

Nous avons besoin de gens qui savent ce qui se passe sur le marché. Or, nous ne sommes pas organisés en conséquence. Que nous faudrait-il, me demanderez-vous, pour être une entreprise d'envergure mondiale ? Il nous faudrait tabler sur nos points forts et identifier nos points faibles en vue de les corriger et de les renforcer – et nous mettre sérieusement à la tâche sans plus tarder. Il vaut mieux prendre le temps de bien faire les choses plutôt que de les faire précipitamment. Je ferai connaître mes plans d'action d'ici à la fin du premier trimestre de 1994.

À propos des nouveaux débouchés...

De tous nos secteurs d'activités, l'intermodal est celui qui est le plus en hausse, surtout à cause de la qualité du service, qui s'y est nettement améliorée ces dernières années. Nous avons prouvé que nous pouvons donner de la qualité, comme le montre, du reste, la confiance que nous témoignent d'autres transporteurs comme J.B. Hunt.



Nous ne nous sommes pas encore attaqués au marché des transports sur moyennes distances. Il y a là un potentiel énorme pour le chemin de fer qui n'a pas été exploité jusqu'à présent, pas plus que celui des transports sur courtes distances. Dans l'état actuel des choses, l'opération ne serait pas rentable et nous ne serions pas compétitifs. Nous avons de bons services à proposer, c'est vrai, mais ils nous coûtent cher !

On voit déjà des améliorations avec les équipes de conduite réduites, mais il faudrait ramener ces coûts à des niveaux encore plus raisonnables.

À propos de l'ALÉNA...

L'ALÉNA ne fait qu'officialiser une situation qui existait déjà. Toutes les tendances économiques actuelles convergent vers une union commerciale entre le Mexique, les États-Unis et le Canada.

Pour nous, l'ALÉNA se trouvera à accentuer le trafic dans l'axe nord-sud et à compliquer l'existence de certaines de nos industries. Certaines auront plus de mal à tirer leur épingle du jeu, alors que d'autres y excelleront. Nous y trouverons nous-mêmes notre compte dans l'intensification et le prolongement des courants de trafic de ce marché nord-américain agrandi.

À propos de ce qui nous attend...

Notre réseau ne sera plus jamais pareil. Il y a des lignes sous-exploitées et des coins de pays que nous ne desservons plus. À vrai dire, on songe à créer des dépôts où les clients vendraient laisser leurs marchandises à expédier par rail, ou encore à recourir à une formule intermodale plutôt qu'à un régime de transport exclusivement ferroviaire. C'est ce genre de formules que nous devons envisager dans bien des cas.

Nous devons nous demander comment nous pouvons répondre aux besoins des clients et comment nous pouvons le faire d'une manière qui sera profitable. S'il n'y a pas d'argent à faire dans une desserte donnée, nous n'en serons pas, un point c'est tout.

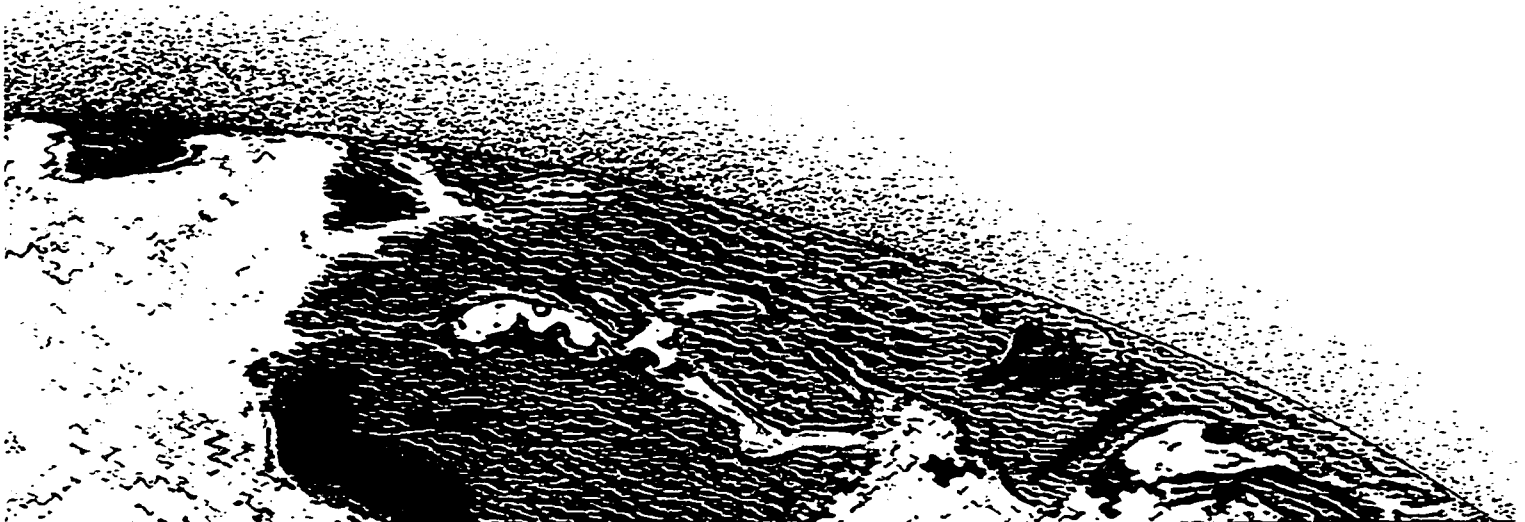


À propos du message qu'il veut donner au personnel...

Voyons-nous comme une entreprise de catégorie mondiale. Je suis un gagnateur et je fais ce qu'il faut pour gagner. Dans notre métier, cela veut dire faire mieux que les autres pour satisfaire le client et faire plus de profits que ses concurrents. Nous devons relever la qualité de notre service aux niveaux couramment pratiqués dans le monde. Allons de l'avant et soyons des gagnateurs et des gagnantes. Je veux que le CN soit là pendant encore longtemps.



*La réussite, c'est
notre affaire à tous
et à toutes.*



Linking individual performance to corporate objectives

In this month's column, I would like to talk about OUR corporate objectives and YOUR performance.

Over the last couple of months, we have been working very hard at setting up a series of objectives based on our strategies to prosper. Our objectives are also in response to what our customers tell us they need and how we perform.

Achieving these objectives is critical to our success. It is therefore important that each of you understand clearly what is expected and participate in the objective setting process. If your department's objectives have not been communicated to you, I urge you to go to your supervisor or your supervisor's supervisor and ask them for an explanation.

To demonstrate the importance I give to these objectives, we are introducing a new concept called performance management based on three fundamental principles:

1. linking individual objectives to company goals;
2. providing timely feedback, and coaching to ensure the proper development of employees;
3. improving our management of people skills by providing subordinates an opportunity to give the supervisors feedback on their management abilities.

Clearly defined objectives

People have to understand what's expected of them. They must see a clear link between their responsibilities and the objectives defined for their department. They have to be able to say, "I know what's expected of me and how customer expectations are defined and measured." The department's objectives fit neatly into the overall plan — linking every department's objectives into the company's goals. It's only through the combined efforts of all individuals within our organization working towards a common set of objectives that we will meet our customers' needs, provide excellent service, reduce our operating costs and improve overall performance.

Employee performance must also be managed through ongoing and regular feedback in order to assess our ability to achieve these goals. If performance isn't measured against a clear set of objectives, how can we define the quality of our work?

Ongoing process

Managing performance is an on-going process between managers and their subordinates. By clarifying and reinforcing what good performance is, managers are able to reinforce these behaviors and thus accelerate individual and group development by providing constant feedback. Where expectations are not being met, employees and supervisors can work together to identify the problem and implement a solution.

Management capabilities

Performance management is a two-way street. It opens the door for employees to have input in developing their objectives and ways of achieving them.

It's also upward feedback. Supervisors must foster a climate where involvement, empowerment and supportive coaching are the norm, enabling employees to solve problems that otherwise might not get done. It's a cultural change that clearly has to happen at all levels of the organization.

I believe it is essential that employees have the opportunity to not only be involved in objective-setting, but that they have the opportunity to provide their managers with an assessment of how well they are managing their subordinates.

For the first time we will be introducing a feedback questionnaire to managers from their subordinates. The goal at this stage is not to evaluate managers but to obtain useful feedback from their immediate subordinates to help them improve their management skills. Hopefully, this tool will be used to facilitate a dialogue which will lead to improvements and create an environment conducive to teamwork, communication and trust.

Performance management is a process which will help managers and employees tackle the enormous challenges facing all of us this year. It supports the direction of the company of setting measurable objectives. At the same time, we need to improve our management of people capabilities and focus on developing the skills and competencies that will help make us successful.

Rendement individuel et objectifs d'entreprise : des éléments indissociables

Une chose est certaine : vous avez un rôle capital à jouer dans la réussite de notre entreprise. VOTRE rendement est intimement lié à l'atteinte de NOS objectifs.

Nous avons travaillé très fort ces derniers mois pour fixer des objectifs qui nous permettront de combler les besoins de nos clients et d'atteindre la prospérité.

Nous ne pouvons pas nous permettre de manquer notre coup. Il est donc impératif que chaque membre du personnel comprenne bien ce que l'on attend de lui et qu'il sente qu'il joue un rôle dans l'établissement de ses objectifs. Si vous ne connaissez pas encore les objectifs de votre service, je vous incite à aller demander sans tarder des explications à votre chef hiérarchique, et même plus haut s'il le faut.

Pour vous prouver l'importance que nous accordons à cette question, nous introduisons cette année la gestion du rendement, un nouveau processus qui s'appuie sur les trois principes fondamentaux suivants :

1. réussir à faire le lien entre les objectifs du personnel et ceux de la Compagnie ;
2. fournir au personnel, en temps opportun, une rétroaction, un encadrement et un perfectionnement professionnel adéquats ;
3. améliorer les habiletés de gestion du personnel cadre grâce à la rétroaction ascendante (qui consiste à donner au personnel l'occasion de commenter la performance des chefs hiérarchiques).

Des objectifs clairs

Il faut que les gens comprennent ce que l'on attend d'eux. Il faut qu'ils puissent constater un lien évident entre leurs responsabilités propres et les objectifs de leur service ou de leur groupe. Chaque personne doit être en mesure de dire : « Je sais ce qu'on attend de moi ; je sais aussi comment sont définies et mesurées les attentes de la clientèle. » Les objectifs du service s'imbriquent avec ceux de tous les services et de la Compagnie pour former un tout. Pour arriver à satisfaire les besoins de notre clientèle, à fournir un excellent service, à réduire nos coûts d'exploitation et à améliorer notre rendement global, il faut que tous les membres du personnel tirent dans le même sens.

Il importe aussi de bien gérer le rendement du personnel en lui fournissant une rétroaction constructive et constante. C'est le seul moyen de mesurer notre capacité à atteindre nos objectifs. Le personnel doit avoir l'heure juste. Comment définir la qualité du travail sans un ensemble d'objectifs clairs servant à mesurer le rendement ?

Processus continu

La gestion du rendement est un processus continu : il faut que les gestionnaires et leurs subordonnés y participent régulièrement. Les gestionnaires doivent préciser le rendement attendu et renforcer toute action en ce sens ; ils seront ainsi à même d'encourager ces comportements et donc d'accélérer le perfectionnement individuel et collectif par une rétroaction constante. Et là où les résultats ne sont pas à la hauteur des attentes, le personnel et les chefs hiérarchiques peuvent, ensemble, identifier le problème et y trouver une solution.

Une gestion de qualité

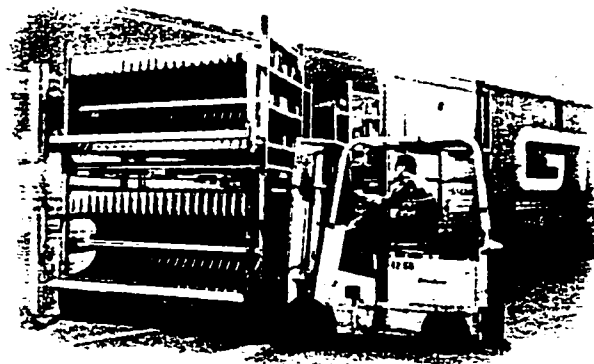
La gestion du rendement ne se fait pas à sens unique. Elle donne au personnel l'occasion de participer à l'élaboration de ses objectifs individuels et à la définition des moyens pour les atteindre. La gestion du rendement s'accompagne également de rétroaction ascendante. Le personnel de supervision doit favoriser un climat où règnent la participation, la responsabilisation et un encadrement enrichissant ; un climat dans lequel le personnel est habilité à résoudre des problèmes qui autrement resteraient sans solution. Il s'agit là d'un changement culturel qui doit, cela va de soi, se produire à tous les échelons de l'organisation.

Il est essentiel, selon moi, que le personnel participe à l'établissement de ses objectifs, mais aussi qu'il puisse informer ses chefs hiérarchiques de ce qu'il pense de leur style de gestion.

Nous avons donc élaboré un questionnaire de rétroaction ascendante. Il ne s'agit pas à proprement parler d'évaluer le rendement des superviseurs, mais de les aider à acquérir de meilleures habiletés en gestion des ressources humaines. Cet outil favorisera, espérons-le, un dialogue constructif grâce auquel nous pourrions apporter les améliorations qui s'imposent et créer un milieu de travail propice à la collaboration, la communication et la confiance.

La gestion du rendement aidera les gestionnaires et le personnel à relever les énormes défis qui nous attendent cette année. Elle s'inscrit dans les orientations privilégiées par la Compagnie, soit l'établissement d'objectifs mesurables et l'identification des besoins de la clientèle. Nous devons, par ailleurs, améliorer nos habiletés en gestion des ressources humaines et tout mettre en oeuvre pour développer les aptitudes et compétences dont nous avons besoin pour réussir.

Grand Trunk & Santa Fe team with General Motors to serve the North American auto buyer



The service industries, unlike their manufacturing counterparts, have been somewhat reticent in making use of Total Quality management techniques. But, as the time-honored saying goes, better late than never, and better is precisely the goal of a joint project between Grand Trunk Western, Santa Fe Railroad and General Motors Corp.

City that currently makes the Buick Century and the Oldsmobile Cierra. The two railroad companies have teamed up to haul the parts and are working closely with General Motors representatives on planning and procedures.

Under the program, Grand Trunk brings loaded rack cars from the three Michigan cities to Chicago before handing them off to an intermediary beltway operation. Blocks of cars then get switched into Santa Fe trains for the rest of the journey southwest.

Total Quality concepts that have been used for years by many manufacturing firms, including the auto companies, have been incorporated into the effort. It's an idea, according to Grand Trunk director Quality Jim Krikau, whose time has come.

"Oklahoma City is, I think, a template project for all types of quality initiatives here in the US," Krikau says. "In the project itself you find the core ingredients of this thing called Total Quality: the customer-driven concepts you keep hearing about, looking at the processes rather than the functions of departments in an organization and using objective measurements so you can manage by fact and not by perception."

The auto industry, reacting to the loss of market share to the Japanese, began adopting Total Quality ideas in the late 1970s, but the service industries have been slower to respond. The changing competitive climate has caught up with service companies like the railroads, however, forcing them to modernize their management practices. Part of the new approach can include treating the customer as a partner rather than just the terminal point of the transaction.

"Your customers, even though you're working for them and trying to meet their requirements, have to 'partner' with you," Krikau insists. "Any effective change you're going to make to serve them better is going to require change on their part to some degree. In this regard, GM in Oklahoma City is an outstanding partner. They're willing to do whatever it takes."

Krikau is using something called statistical process control (SPC) to analyze cycle time. SPC has enabled him to develop flow charts that graphically illustrate the progress of rack cars along the various points of the transport route. The sections of the charts that are relatively level and show little variation suggest efficient movement. Those portions that contain deviations, however, indicated by sharp spiking lines either up or down, reflect problems at particular junctions.



Using statistical process control techniques, GT's Quality director Jim Krikau, shows Automotive market manager Phil Rutledge the "cycle time" of a rail car assigned to Oklahoma City.

Specifically: Better time efficiency, better resource utilization and, of course, better customer satisfaction.

The collaborative effort, initiated in February of 1993, is designed to move automobile parts as quickly and efficiently as possible from supply facilities in Flint, Pontiac and Lansing to a General Motors assembly plant in Oklahoma

Gordie Dontje, forklift driver at the GM parts plant in Lansing, Michigan, loads auto parts into a GT rail car destined for GM's assembly plant in Oklahoma City.



Train 255 leaves Lansing, Michigan with rail cars for interchange with ATSF in Chicago for final destination in Oklahoma City.

Once identified, the deviations ("special causes" as Krikau calls them) can then be looked at to find out what went wrong.

Standards establishing average times to move rack cars from one point to another also have been set and provide hard figures about slowness and dwell delays.

The idea is to accumulate information that can be used to make streamlining decisions.

"The fewer steps it takes, the less chance there is for a mistake, and then what you wind up with is greater reliability," Krikau maintains. "And once you've established reliability, you go to the next level, which is predictability. This is the real power of SPC, because when you can predict you can market your services more effectively."

The task of compiling statistical information was hindered by the disastrous flooding of 1993. The high waters make travel to points west of the Mississippi River difficult and skewed route times. As a result, planners lost three months of data they needed for their analysis.

Still, Krikau is convinced the program eventually will realize dividends.

"We are continually measuring," he says, "so we can do trending analysis."

"One thing it's going to take is leadership, where the leaders, to use a bromide, walk the talk. Vice-president Corporate Bob Walker and Dave Wilson, Vice-president of U.S. Operations, are sold on this concept. My role is to keep them wired to continue walking the talk."



Collaboration et qualité totale au service de l'industrie automobile



À l'encontre des industries manufacturières, les sociétés de service ont été beaucoup plus réticentes à emboîter le pas de la Qualité totale. Mais, comme le dit le dicton, mieux vaut tard que jamais et trois grandes sociétés — le Grand Trunk Western, le Santa Fe Railroad et la General Motors — ont décidé d'unir leurs efforts et de s'engager à fond dans la recherche d'une plus grande amélioration.



À l'aide d'un système de contrôle statistique des processus, Jim Krikau, directeur de la Qualité au GT, explique à Phil Rutledge, directeur du Marché des véhicules automobiles, le cycle de rotation d'un wagon affecté à la desserte d'Oklahoma City.

Amélioration de la gestion du temps, amélioration de l'utilisation des moyens et des ressources et bien sûr, amélioration de la satisfaction de la clientèle.

Cet effort de collaboration remonte à février 1993. Son but : acheminer les pièces automobiles le plus rapidement et le plus efficacement possible depuis les usines de Flint, Pontiac et Lansing, au

Michigan, jusqu'à l'usine de montage d'Oklahoma City où General Motors fabrique la Buick Century et l'Oldsmobile Ciera. Les deux chemins de fer font équipe pour l'acheminement des pièces ; ils travaillent aussi étroitement avec les représentants de la General Motors à la planification des transports et à l'établissement des processus de travail.

En vertu de ce programme, le Grand Trunk achemine les wagons chargés depuis les trois villes du Michigan jusqu'à Chicago où il les remet à un chemin de fer intermédiaire. Les lots de wagons sont ensuite accrochés aux trains du Santa Fe qui complètent le parcours vers le sud-ouest.

Ce programme fait appel aux concepts de qualité totale utilisés depuis plusieurs années par plusieurs sociétés manufacturières, dont bon nombre de constructeurs automobiles. C'est une idée qui a fait son chemin, estime Jim Krikau, directeur de la Qualité au Grand Trunk.

«Oklahoma City pourrait, selon moi, facilement servir de modèle à une foule d'initiatives qualité aux États-Unis», ajoute M. Krikau. On y retrouve tous les principes de base de la qualité totale : l'orientation-client dont on entend beaucoup parler ; l'importance des processus qui doivent avoir priorité sur les fonctions des divers services de l'entreprise et enfin, la mise en œuvre d'un système objectif de mesure qui permet de gérer à partir des faits et non de perceptions.

Ebrannée par la perte de sa part du marché en faveur des Japonais, l'industrie automobile a commencé à se tourner vers les principes de qualité totale à la fin des années 1970. Les sociétés de service, comme les chemins de fer, ont été par contre plus lentes à réagir. L'intensification de la concurrence les force

maintenant à revoir de fond en comble leurs méthodes de gestion. L'une des transformations les plus notables : le client n'est plus considéré comme le point terminal d'une opération commerciale, mais bien comme un partenaire tout au long du processus.

«Les clients doivent être associés à votre démarche, même si c'est vous qui travaillez pour eux et qu'il vous incombe de satisfaire leurs exigences», souligne M. Krikau. Tout changement que vous mettez en œuvre pour mieux les servir exige, jusqu'à un certain point, un changement de leur part. Et à cet égard, la GM d'Oklahoma City est un partenaire hors pair ; elle est prête à faire tout ce qu'il faut pour améliorer les processus.»

Après un an environ, l'expérience qualité en est encore à ses débuts. M. Krikau a compilé des statistiques sur la durée des cycles wagons — soit le nombre d'heures qu'il faut à un wagon pour aller de l'usine d'approvisionnement à la chaîne de montage d'Oklahoma City, et pour revenir à l'usine — mais il est encore trop tôt pour formuler des recommandations.

Pour l'aider dans l'étude des cycles wagons, M. Krikau fait appel à un système de contrôle statistique des processus (CSP). Au moyen de graphiques, le CSP lui permet de suivre l'avancement des wagons tout au long du parcours. Plus l'écart entre la progression projetée et la progression réelle est minime, plus le mouvement est efficace. Tout écart significatif, par contre, est signalé par une ligne à crête ascendante ou descendante, faisant ressortir les problèmes qui surviennent à certaines jonctions particulières. Ces écarts, une fois repérés, sont analysés afin d'en déterminer les causes.

À l'usine de pièces GM à Lansing, Gordie Dontje charge les pièces automobiles dans un wagon à destination de l'usine de montage d'Oklahoma City.



Le train 255 quitte Lansing au Michigan. À Chicago, les wagons seront pris en charge par l'ATSF qui les acheminera vers Oklahoma City, leur destination finale.

On a également normalisé les temps moyens d'acheminement des wagons d'un point à un autre, ce qui permet de définir avec précision tout ralentissement ou tout retard imputable à un séjour prolongé en triage ou à un point d'échange.

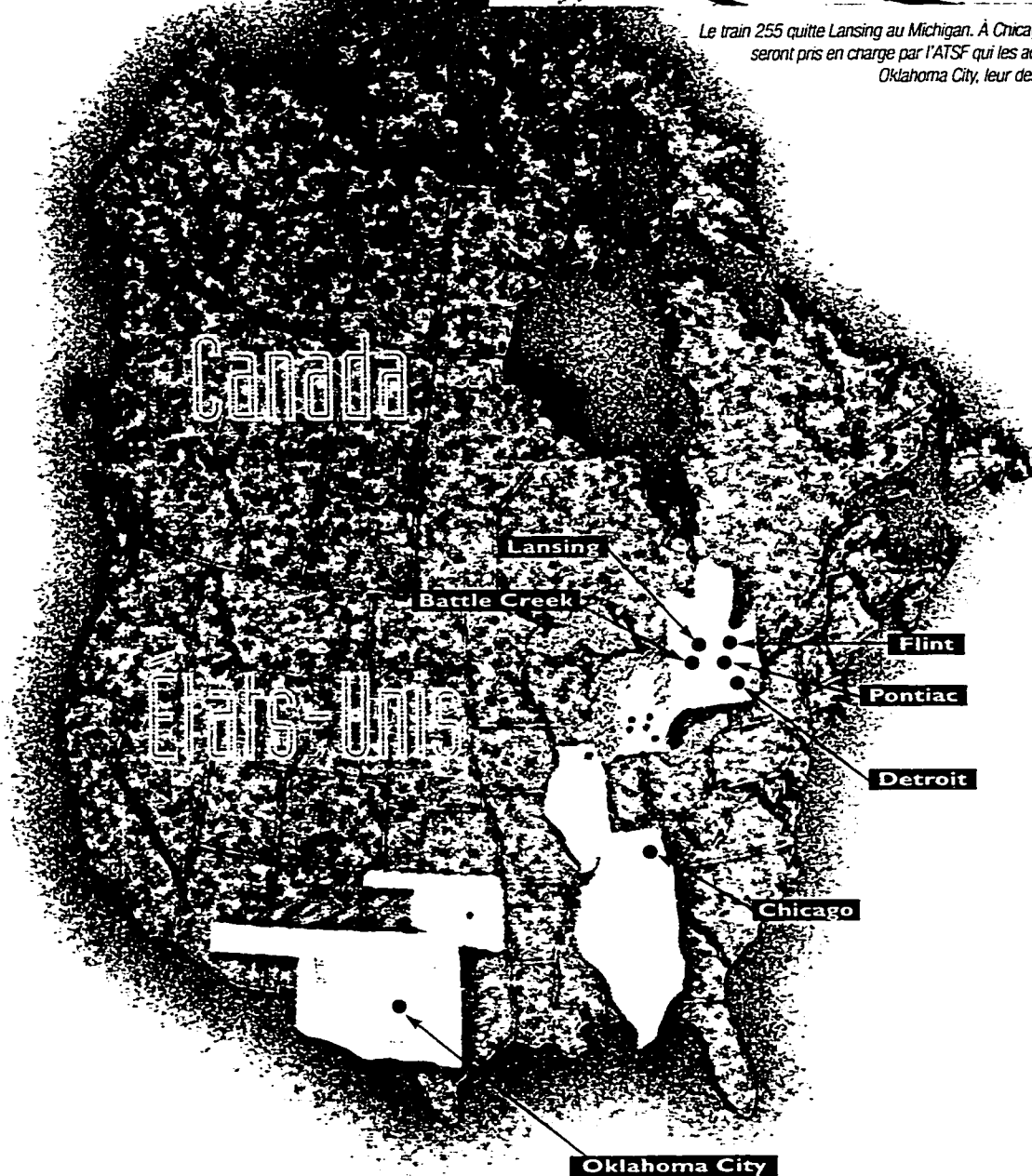
Les renseignements ainsi obtenus nous permettront de rationaliser les processus.

«En réduisant les étapes, vous éliminez les risques d'erreur et ce faisant, vous augmentez considérablement votre fiabilité, précise M. Krikau. Une fois la fiabilité acquise, vous pouvez passer à l'échelon suivant : la prévisibilité. Et c'est là que réside toute la puissance du CSP : en étant mieux à même de prédire, vous êtes mieux à même de vendre vos services avec plus d'efficacité.»

La compilation des données statistiques a toutefois été faussée par les graves inondations de 1993. Les trains ne pouvaient se rendre à l'ouest du Mississippi qu'avec d'énormes difficultés, et les durées d'acheminement n'avaient plus rien de normal. Les planificateurs ont donc perdu trois mois de données essentielles à leurs analyses.

Mais M. Krikau demeure convaincu que le programme portera fruit dans un proche avenir :

«Nous continuons de mesurer notre rendement, afin de pouvoir faire une analyse des tendances. Mais le succès de ce programme réside dans le leadership que nous exercerons. Bob Walker, vice-président général, et Dave Wilson, vice-président Exploitation des lignes américaines, donnent leur entière adhésion au projet. Mon rôle est de les tenir sans cesse au courant pour obtenir leur soutien et leur leadership.»





Dialogue with the President

Going beyond the classroom

We live and work in a technological age where things are constantly changing.

We're investing millions to keep up with the industry and even lead in many

areas. But investing money in technology alone will not allow us to become successful. Technology must be complemented with the proper education and training — learning new tasks, new processes — to ensure that we can be the best at what we do.

Training is very important to me. I value what training can achieve in individuals and for the organization. I believe that investing in training, combined with other efforts,

will allow us to have a skilled and motivated workforce, receptive to cultural change. We need to get over the hump and get everyone involved in improving our situation.

Tops in technological training

CN has made huge investments in training facilities, such as Gimli, which provide excellent technical training. We do a good job of that. We are a technology-driven industry where we have to continue upgrading those skills.

That is why CN must be a learning organization. Training must provide the tools that we need to stay

abreast of not only technological changes but improvements in management style as well. The thing is, you have to want to do it for it to be effective.

I have said on numerous occasions that we must change. We are going to have to work hard at making change come about, and it won't happen unless we adopt new attitudes and work practices suited to today's realities. Training will help us acquire new skills and knowledge, adapt to change, and seek out opportunities to innovate and improve. In order for our training to be customer focused and effective, I support the current reorganization of training at CN.

Three-way partnership

A learning organization needs a three-way partnership to make change come about.

- First it needs the willingness of each and every employee to accept the fact that change is inevitable, and to actively seek out training that will increase the knowledge and skills you require to keep up with the demands of the job.
- Next it needs each and every manager to provide the opportunities for their people to grow with the newly acquired skills, to pave the way for the employees to implement change, and to provide encouragement and recognition for good performance.

- Last, but not least, it needs the Training department to provide the appropriate training for employees to upgrade skills and acquire new ones for the challenges we face now and in the coming years.

If any of these elements is missing, any initiative undertaken to become a learning organization will not be effective.

Why the focus on becoming a learning organization? I want CN to become first-class, mentoring our own people to be flexible, to be able to adapt to change, to seek opportunities, to take action and to be innovative, so that we will be recognized as a first

rate organization with a first-rate staff. My expectations are high but I am sure we can achieve them.

A change in our culture is going to be a learning process. We have to make this a company-wide shared preoccupation. What you learn in training should be tied to our business goals and objectives. It must be stimulating, inspiring and effective. We must be able to measure and see concrete result. Your willingness to learn, to implement what you learn and to be agents of change is crucial to our success.



Dialogue avec le Président

La formation continue : un gage de réussite

Nous vivons dans un monde en constante évolution, où la technologie occupe la toute première place. Nous investissons des sommes considérables pour suivre les progrès qui surviennent dans l'industrie, et pour être à la fine pointe dans plusieurs domaines. Mais, pour réussir, il ne suffit pas d'investir uniquement dans la haute technologie. Il faut également assurer une formation adéquate — en apprenant de nouvelles tâches, de nouveaux processus — pour être les meilleurs dans notre champ d'activité.

À mes yeux, la formation est primordiale, et il y accorde une grande valeur, autant pour la personne que pour l'entreprise. Je crois qu'en la combinant à d'autres activités, elle nous permettra d'avoir un personnel qualifié, motivé et ouvert à une nouvelle culture d'entreprise. Nous ne devons jamais relâcher nos efforts et nous devons tous ensemble améliorer notre situation.

En tête pour la formation technique

Le CN a investi massivement dans des centres de formation, comme celui de Gimli, où se donne une excellente formation technique. Nous sommes à l'avant-garde

dans ce domaine. Et comme notre industrie est centrée sur le développement technologique, nous devons perfectionner sans cesse nos connaissances techniques.

C'est pourquoi, il faut que le CN privilégie l'apprentissage continu. Autrement dit, pour être compétitifs, nous devons constamment affiner nos connaissances et nos compétences. La formation doit nous donner les outils nécessaires non seulement pour nous tenir au fait des progrès techniques, mais aussi pour améliorer notre gestion. Pour être efficace, il faut vouloir l'être.

Je l'ai souvent répété : nous devons changer. Nous devons travailler très fort pour que les changements s'opèrent. Rien ne se fera si nous ne nous débarrassons pas de nos habitudes désuètes. Nous devons adapter nos méthodes de travail aux réalités nouvelles. J'appuie donc entièrement la réorganisation de la formation qui est en cours au CN (voir l'article en page 9), car je tiens à ce que nos programmes mettent l'accent sur la clientèle et sur l'efficacité.

Un partenariat à trois

Une entreprise qui privilégie l'apprentissage continu doit s'engager dans un partenariat à trois si elle veut que les changements se réalisent.

- D'abord, les employés doivent reconnaître que le changement est inévitable et rechercher activement les programmes de formation qui viendront enrichir leurs connaissances et leurs compétences ; ils sauront ainsi s'adapter aux nouvelles exigences de leur poste.

- Il faut ensuite que les cadres donnent à leurs employés des occasions de véritablement mettre en pratique ces connaissances nouvellement acquises, les aident à mettre en oeuvre les changements et leur fournissent des témoignages d'encouragement et de reconnaissance pour un travail bien fait.

- Et enfin, le Service de la formation doit faire en sorte que les employés améliorent leurs compétences et en acquièrent de nouvelles qui leur permettront de relever les défis d'aujourd'hui et de demain.

Si l'un de ces trois éléments manque, les moyens engagés pour privilégier l'apprentissage continu ne donneront pas de résultat.

Mais pourquoi insister sur l'apprentissage continu ? J'aimerais que le CN atteigne un très haut niveau d'excellence, que ses employés jouissent d'un encadrement souple, qu'ils puissent

s'adapter aux changements, sachent exploiter les occasions, agir, innover. Voilà comment le CN sera reconnu comme une entreprise de tout premier ordre, dotée d'un personnel de grande valeur. Bler sûr, mes attentes sont élevées mais je suis persuadé qu'ensemble nous pourrions y arriver.

Nous passerons nécessairement par une période d'apprentissage si nous voulons adapter notre culture d'entreprise. Nous devons tous, autant que nous sommes, partager la même préoccupation. Tout ce que le employés apprennent dans les programmes de formateur doit être rattaché à nos objectifs d'entreprise. Il faut stimuler, inspirer, communiquer la notion d'efficacité. Nous devons pouvoir mesurer les résultats très concrètement. Votre volonté d'apprendre, de mettre en pratique vos connaissances, d'être des agents de changement est vitale pour notre réussite.

Tellier reviews progress to date

On March 8th, major newspaper headlines announced: "What do Women Want?" "90's Movement Defies a Definition" "What is Feminism?". But at CN there was positive feedback and concrete commitments regarding the evolution of women's issues within the company.

Speaking the day before to over 500 women from CN Headquarters and the St. Lawrence region, CN's President & CEO addressed what has been done, what should have been done, and what has yet to be done. Following an introduction by Marie Tellier, assistant vice-president - Employment Equity and Official Languages, Mr. Tellier moved immediately into a progress report on the main issues raised at last year's presentation.

Progress of women in management

Four women now hold executive positions, accounting for 16.7 per cent of the 24 executive positions at CN. The number of women in senior management positions has risen slightly from 7.9 per cent to 8.3 per cent with a target of 10 per cent for 1994. And women holding middle management positions has risen from 13.5 per cent to 14 per cent in the last year.

Mr. Tellier did not hide the fact that he himself was not satisfied with the progress in these areas. However, he was optimistic that there would be improved representation at all levels in 1994, citing the increase of women in the succession plan for the top 60 positions, 31 women candidates (34 per cent of 94 total candidates) in the corporate general Management Development Program, and new recruitment initiatives.

Admittedly, Operations remains the area of least representation despite the fact that it represents the largest pool of human resources at CN. The audience was assured that Jack McBain, senior vice-president - Operations, and the regional vice-presidents are committed to improving a historically difficult situation.

Harassment in the workplace

Mr. Tellier reminded the audience that the problem would not be resolved overnight. All reported cases of harassment have been dealt with, evidence that efforts to eradicate sexual harassment from our workplace are "serious and of an on-going nature."

Maternity issues

Mr. Tellier admitted that changes in workload during pregnancy is a difficult issue to resolve. It is the duty of managers to accommodate running



trades employees as much as possible during their pregnancy, and discussions with the unions are on-going, but he himself is not satisfied with the progress. He encouraged all employees to put pressure on their managers and union leaders to work towards a solution.

Balancing work, family, and health

Other progress reviewed included: the additional expansion to La Gare de Rives... a good example of the speed with which initiatives can be achieved with employee commitment and support; a brochure for improved awareness of the possibilities of permanent part-time, and job-sharing arrangements; a plan for a pilot information/referral service program for child and elder care; and discussion with the unions of increasing the spare-board on-call time.

Open forum

With the assistance of Gerald Davies, senior vice-president - Marketing, and Michel Boucher, vice-president - St. Lawrence region, Mr. Tellier responded to concerns raised such as overtime at Monterm Intermodal Terminal; the elimination of traffic coordinators; more flexible hours for scheduled employees with last-minute family problems, and reduced hours and job sharing for non-scheduled clerical personnel.

Particularly well received by both Mr. Tellier and the audience was the suggestion that scheduled women employees seek representation at the national bargaining table to expedite the resolution of on-going issues.

Other constructive suggestions put forward during the 70 minute bilingual Q & A session included extended pregnancy leave, an exercise room, and self-defence courses for employees who have to work late or night shifts.

Mr. Tellier openly recognized that the progress on many women's issues at CN is too slow. Thus the recurring theme of his presentation was that all employees at CN... "help me help you" by "...putting pressure on managers, union leaders and fellow employees so that the issues discussed last year and this morning see further progress."

He closed the meeting with a commitment to review any good ideas or suggestions put forth to improve the situation for women at CN.

La situation des femmes au CN: où en sommes-nous?



Le 8 mars dernier, les quotidiens tiraient : «Que veulent les femmes?», «Qu'est devenu le mouvement des femmes en 1994?», «Qu'est-ce que le féminisme?». Au CN par ailleurs, on récoltait des commentaires positifs et des engagements concrets à l'égard de l'avancement des femmes dans l'entreprise.

En présence de plus de 500 femmes du siège social et de la région du Saint-Laurent, le pdg du CN a brossé un tableau de ce qui avait été fait, de ce qui aurait dû être fait et de ce qu'il restait à faire. Après un bref exposé de Marie Tellier, vice-présidente adjointe Équité en emploi et langues officielles, M. Tellier a immédiatement entamé le suivi des principales questions soulevées lors des rencontres des 8 et 9 mars 1993.

Progrès des femmes cadres

Quatre femmes, soit trois vice-présidentes et une chef de cabinet, siègent maintenant au Comité de la direction générale. Les femmes occupent donc, au CN, 16,7 pour cent des 24 postes de haute direction. Leur représentation chez les cadres supérieurs a légèrement augmenté, passant de 7,9 à 8,3 pour cent, et devrait atteindre 10 pour cent en 1994. On compte 14 pour cent de femmes chez les cadres intermédiaires, contre 13,5 pour cent l'année dernière.

M. Tellier n'a pas caché que ces progrès ne le satisfaisaient pas. Il s'est toutefois montré optimiste en indiquant que la représentation féminine pourrait s'améliorer à tous les échelons en 1994. Il a cité la participation accrue des femmes au programme de planification de la relève (les 60 plus hauts postes), de même que l'inscription de 31 femmes (34 pour cent des 91 candidatures) au Processus de perfectionnement en direction générale de l'entreprise, ainsi que de nouvelles initiatives en matière de recrutement.

L'Exploration demeure le domaine où la représentation des femmes est la moins élevée au CN bien qu'on y trouve le plus grand bassin de ressources humaines. On a donné l'assurance aux personnes présentes que Jack McBain, premier vice-président Exploration, et les vice-présidents régionaux s'étaient engagés à corriger cette situation, difficile depuis toujours.

Le harcèlement en milieu de travail

M. Tellier a rappelé à l'auditoire que ce problème ne disparaîtrait pas du jour au lendemain. Toutefois, tous les cas de harcèlement signalés ont été traités et le CN déploie des efforts «sérieux et constants» pour éliminer le harcèlement sexuel du milieu de travail.

Les questions associées à la maternité

M. Tellier a admis que l'adaptation du travail en période de grossesse continuait de poser des problèmes. Selon lui, les gestionnaires ont le devoir de faciliter les

choses aux employées enceintes, membres du personnel itinérant. Il a rappelé l'existence de pourparlers avec les syndicats tout en ajoutant qu'il n'était pas personnellement satisfait de leur avancement. Il a encouragé les employées à exercer des pressions auprès de leurs dirigeants et de leurs chefs syndicaux pour accélérer le processus.

L'équilibre entre le travail, la famille et la santé

D'autres progrès ont été passés en revue : l'agrandissement de La Gare de nîres — un bon exemple de la vitesse à laquelle des initiatives peuvent être réalisées grâce au soutien et à l'engagement du personnel ; une brochure de sensibilisation au temps partiel permanent et au partage d'emplois, formules disponibles au personnel non syndiqué ; un projet pilote d'information et d'orientation concernant la garde des enfants et des aînés ; et les négociations avec les syndicats concernant l'augmentation du délai d'appel au tableau de remplacement.

Débat ouvert

Secondé par Gerald Davies, premier vice-président Marketing, et Michel Boucher, vice-président région du Saint-Laurent, M. Tellier a répondu à plusieurs autres inquiétudes soulevées. Il a été question des heures supplémentaires au terminal intermodal Montem, de l'élimination des postes de chef de triage, de l'assouplissement des horaires de travail du personnel syndiqué aux prises à la dernière minute avec des problèmes d'ordre familial, ainsi que de la réduction de la semaine de travail et du partage d'emplois pour le personnel de bureau non syndiqué.

Une participante a suggéré que les syndiquées soient représentées à la table de négociation nationale afin de faire avancer la résolution des questions en suspens. Sa suggestion a été particulièrement bien accueillie par M. Tellier et l'auditoire.

Au cours de la période de questions qui a duré 70 minutes, d'autres suggestions constructives ont été formulées. On a évoqué, entre autres, un congé de maternité prolongé, une salle d'exercices et des cours d'autodéfense pour les femmes qui travaillent tard ou à des postes de nuit.

M. Tellier a franchement reconnu que les progrès ne sont pas assez rapides dans certains domaines touchant les femmes. «Aidez-moi à vous aider», a-t-il demandé à plusieurs reprises. Il a suggéré aux principales intéressées de faire pression sur les gestionnaires, dirigeants syndicaux et collègues pour que se règle le plus rapidement possible toutes les questions soulevées l'an dernier et lors de la rencontre du 8 mars 1994.

M. Tellier a clôturé la rencontre en s'engageant à étudier toute bonne idée ou suggestion mise de l'avant pour améliorer la situation des femmes au CN.



Dialogue with the President

Safety rules

CN is among the safest of all Class 1 railways in North America, based on 1993 figures as reported by the US Federal Railroad Administration. Achieving this status takes hard work and a commitment by all employees to keep the workplace safe for ourselves and our co-workers. I commend everyone for this accomplishment.

What a winter

Our service suffered as a result of a series of derailments this winter. This year's extreme cold was tough on our track and equipment as well as on our people. Despite the harsh realities of our Canadian weather, many employees, including three groups of Engineering Maintenance of Way employees in Saskatchewan District, reported an injury-free year in 1993. Safety is a priority with them. Each year we invest more than \$35 million in training employees, including comprehensive safety training programs.

Watching out

Accidents don't discriminate. If you think it won't happen to you, it will only take a close call to bring it too close for comfort. We must think of safety every single minute of the day. Your families expect you home at the end of the day and we want to ensure that your day on the job will get you there safely.

What does it take to be the best? Employee awareness. Safety must become a habit, almost an obsession. Most of us would probably admit to being more careful with our families and during off-the-job activities. Bring those safety values to work with you and watch out for your co-workers as you would your children.

We are experiencing some of the most trying times in the history of this railway. Anxieties and stress can't help but surface during the changes we are undergoing. But we can't let these feelings affect how safely we do our jobs and how we look out for each other.

Your concerns over the effectiveness of safety during downsizing have not gone unheard. But I can assure you

that the reduction in employees, in particular the Engineering restructuring to take effect in mid-July, will not involve either a change in safety and maintenance standards or less maintenance. In fact, we have initiated an action plan to ensure that general safety conditions in main track operations improve.

However, if you feel there are areas that require attention, we want to hear from you. Grim reminders such as fatalities depicted in *Funeral for a Friend* (see story page 6) prove to us that we have fallen short in some way. However, it's also a reminder that accidents can happen, especially if we become complacent with duties we have performed over and over again for many years.

Be it in an office location or on a safety-sensitive job, safety has to start with you. Our past records prove that we can operate safely. Help us ensure the safest possible working environment for yourself and your co-workers by thinking safety first. We as individuals and as a company have too much at stake to aspire for anything less.



Dialogue avec le Président

La sécurité passe avant tout...

Le CN est parmi les chemins de fer de Classe 1 les plus sûrs d'Amérique du Nord, d'après les chiffres communiqués par la US Federal Railroad Administration pour l'année 1993. Nous devons ces excellents résultats à l'engagement et aux efforts de tout le personnel, qui oeuvre sans relâche pour assurer la sécurité de tous et de toutes. Je tiens à en féliciter chacun et chacune d'entre vous.

Quel hiver !

La série de déraillements qui se sont produits cet hiver ont perturbé nos services. Nous avons connu un froid intense, et la saison a été très difficile pour la voie et le matériel, mais aussi et surtout pour le personnel. Toutefois, plusieurs employés dont trois groupes de l'Entretien de la voie du district de la Saskatchewan semblent s'accommoder assez bien de nos rigoureux hivers canadiens, puisqu'ils n'ont eu aucune blessure à signaler en 1993. Pour eux, la sécurité est une priorité. Chaque année, nous consacrons plus de 35 M \$ à la formation du personnel, y compris à des programmes exhaustifs de formation en matière de sécurité.

Soyons vigilants !

Personne n'est à l'abri des accidents. Si vous vous croyez infaillible, un accident ou un quasi-accident risque de vous ramener brutalement à la réalité... Nous devons faire de la sécurité une préoccupation de chaque instant. Votre famille vous attend à la fin de votre journée de travail et nous voulons faire en sorte que vous retourniez chez vous sain et sauf, jour après jour.

Qu'est-ce que ça prend pour être les meilleurs ? La sécurité doit devenir une habitude, presque une obsession, pour le personnel. La plupart d'entre nous admettront probablement être plus prudents avec leur famille et durant leurs loisirs. Tâchez de faire preuve d'autant de prudence au travail et de surveiller vos collègues comme s'ils faisaient partie de vos proches.

Nous vivons actuellement les moments les plus difficiles de toute l'histoire du CN. Les changements en cours sont une source d'inquiétude et de stress, mais nous ne pouvons laisser ces sentiments nuire à la sécurité de notre travail et à l'attention que nous nous prêtons mutuellement.

Bon nombre d'entre vous se préoccupent des répercussions des présentes mesures de réduction des effectifs sur la sécurité. Je vous assure que les compressions de personnel, et en particulier

le réaménagement de l'Ingénierie qui doit entrer en vigueur à la mi-juillet, ne modifiera en rien les normes en matière de sécurité et d'entretien, et n'entraînera aucune diminution de l'entretien. En effet, nous avons mis en oeuvre un plan d'action dans le but d'améliorer la sécurité des principales activités ferroviaires.

Cependant, si vous croyez que certains secteurs méritent une attention particulière, n'hésitez pas à nous le faire savoir. Les tristes événements — tels les accidents mortels sur lesquels porte le vidéo *Funérailles d'un ami* (voir page 6) — démontrent bien que nous ne sommes pas infaillibles. Ils nous rappellent également qu'il est dangereux de se laisser endormir par la routine, et de relâcher sa vigilance lorsqu'on exécute des tâches qu'on a déjà accomplies à maintes reprises au fil des ans. Peu importe où vous travaillez — dans un bureau ou dans un poste critique pour la sécurité — vous devez toujours être conscients et conscientes de l'importance d'être vigilants. Nous avons prouvé, par le passé, que nous pouvons exercer nos activités en toute sécurité. En ayant constamment la sécurité en tête, aidez-nous à garantir le milieu de travail le plus sûr qui soit pour vous et pour vos collègues. En tant qu'êtres humains et membres du personnel de la Compagnie, nous ne méritons rien de moins.

It's not by chance we're one of the safest

One of the biggest topics of conversation during the winter of 1994 was The Winter of 1994, one of the worst on record. All across Canada we experienced record cold, record snow and if you believe what you hear, record rail accidents. The truth is, that while this winter was colder than usual, it was also one of our safest yet.

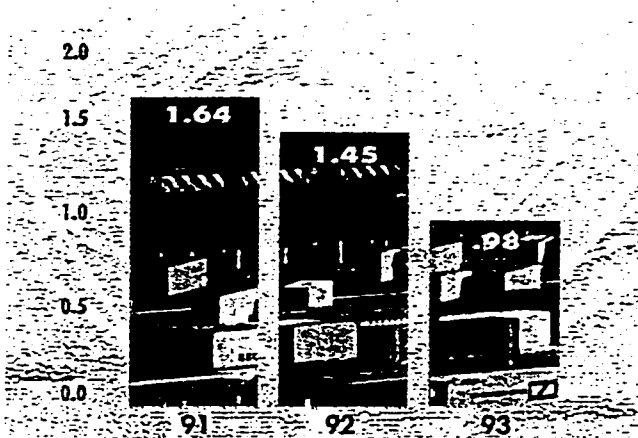
CN North America experienced 19 reportable main track derailments in the first three months of this year. Unfortunately, several of the accidents occurred in the same region within a short period of time, which led the

media to report that CN was experiencing "a bad year". The fact is that those 19 main line derailments compare with 21 in the same winter months of 1993; a year in which CN posted its best ever main track safety record. While there is no such thing as an acceptable number of accidents, CN's safety record is improving every year thanks to the professionalism of CN employees, the training they receive and a commitment by the company to do everything possible to prevent accidents.

CONTINUED ON PAGE 3

CN Rail Main Track Accidents

TSB Reportable



Ratios per MTM

Excludes Non-Company Responsibility

We're one of the safest...

CONTINUED FROM PAGE 1

bird in '93

The results of that effort are visible. The preliminary analysis of the 1993 operating year shows that of all Class 1 railways, CN ranked first in North America in terms of safety. Its ratio of reportable main line accidents per million train miles dropped to 0.98.

That was an improvement over 1992 (1.45), which was better than 1991 (1.64). The 1994 figures to date indicate that CN North America will continue to improve its safety record with fewer accidents over more miles traveled.

"This year's severe winter, the extreme cold and heavy snowfall, definitely contributed to accidents," says Jack McBain, senior vice-president - Operations. "The winter is behind us now and current operating results reflect the improving trend in safety."

CN's safety record isn't improving by chance. By identifying and understanding the basic causes of derailments, CN has been able to implement programs to make rail operations safer.

This year, we will spend \$147 million to maintain and upgrade our rail network, up from \$120 million in 1993. These maintenance and upgrading efforts include track and wood tie replacement, grade stabilization and ballast replacement at various locations across Canada.

TESTING for safety

The company has developed a sophisticated track defect detection system. The TEST system, which is housed in two rail cars, inspects the track with lasers, electronic sensors and video cameras checking the track geometry and rail profile. During the year, all main track is TESTed four or five times, discovering problems before they turn into derailments. As well, Rail Flaw Detection cars operate up to five times per year over main lines finding defective rails so they can be replaced before breaks occur.

CN works closely with the chemical and petrochemical industries to find new ways to safely move regulated goods. As well, CN participates in community information and education campaigns across Canada, increasing local understanding of safety issues in areas where CN traffic is part of community life.

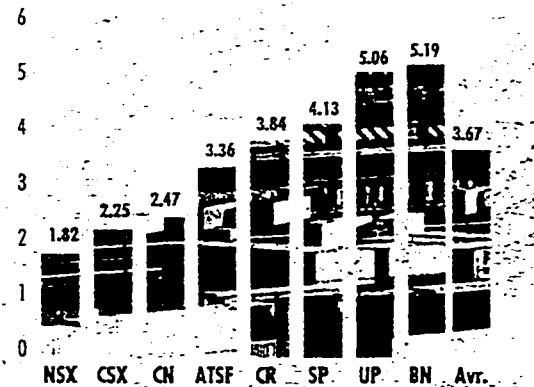
The safety of employees, freight and equipment and the ability to provide consistent service to its customers are of great importance to CN. All of these are threatened by accidents and CN North America will continue to learn from experience, meeting new challenges as they arise, says McBain.

"We are already working towards a plan for next winter which will ensure that we minimize the effects of the extreme cold weather such as we experienced this past January and February."

It is virtually impossible to run a railway that travels millions of miles without any incidents, but CN will do everything possible to maintain its earned reputation as one of the safest railways in North America.

F.R.A. Rail Accidents

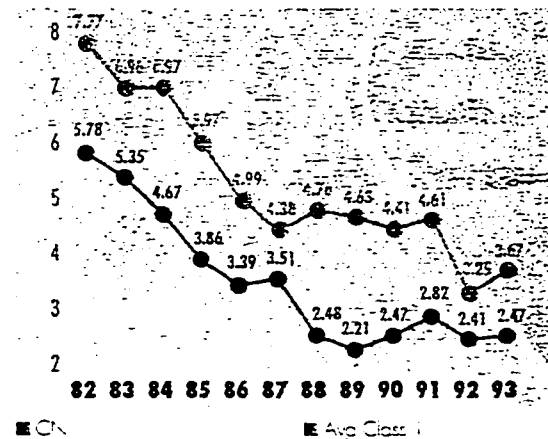
Preliminary 1993 Results



Ratios per MTM
Based on Accident Property Damage over \$6,000 US

FRA Rail Accidents CN vs. Class 1 Average

(Ratio per Million Train Miles)



la sécurité au CN

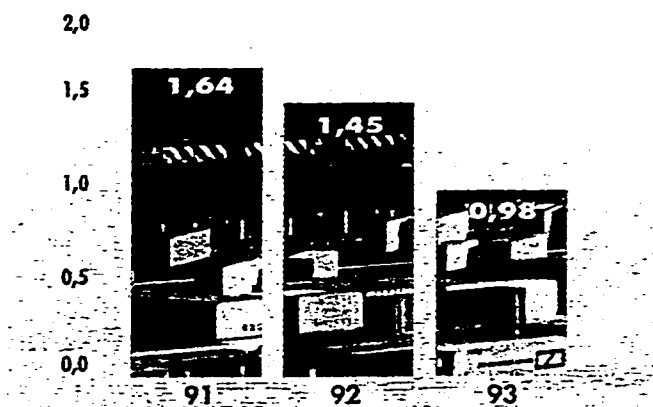
Nos efforts ont porté fruit

Lurant l'hiver 1994, le grand sujet de conversation a précisément été l'hiver 1994, l'un des plus froids, de neige et, à croire que certains racontent, accidents ferroviaires. En fait, l'hiver a certes été plus froid qu'à l'habitude, mais il a aussi été l'un de nos meilleurs en matière de sécurité.

Au cours des trois premiers mois de 1994, 19 déraillements sont survenus sur les voies principales de CN Amérique du Nord. Malheureusement, plusieurs de ces accidents ont eu lieu dans la même région et ce, dans un

court laps de temps, ce qui a fait dire aux médias que le CN connaissait une «mauvaise année». En fait, ces 19 accidents se comparent avantageusement aux 21 survenus pendant les mêmes mois d'hiver de 1993, la meilleure année du CN au chapitre de la sécurité en voie principale. Bien sûr, il n'existe pas de nombre acceptable d'accidents, mais la fiche de sécurité du CN s'améliore chaque année grâce au professionnalisme de son personnel, à la formation qu'il reçoit et aux efforts de la Compagnie qui s'est engagée à faire l'impossible pour prévenir les accidents.

Accidents de trains en voie principale — CN
À déclarer au BST



Ratio par million de milles-trains

Sauf les accidents ne relevant pas de la responsabilité du CN.

Nos efforts ont porté fruit...

FIN DE LA PAGE 1

troisième en 1993

Les fruits de ces efforts sont visibles. Selon l'analyse éliminatoire de l'année exploitation 1993, le CN est au troisième rang des chemins de fer nord-américains de Classe I au chapitre de la sécurité. Le rapport du nombre d'accidents en voie principale par million de milles parcourus a été réduit à 0,98. Il s'agit là d'une amélioration comparative au rapport de 1993 (1,45), qui avait été plus faible que celui de 1992 (1,64). Les statistiques complètes jusqu'à maintenant en 1994 laissent prévoir que le CN d'Amérique du Nord continuera d'améliorer sa fiche de sécurité et cumulera moins d'accidents par million de milles parcourus.

« Cette année, la rigueur de l'hiver, le froid intense et les importantes précipitations de neige ont indubitablement contribué à provoquer des accidents, dit Jack McBain, premier vice-président exploitation. L'hiver est maintenant terminé et les résultats d'exploitation actuels dénotent une tendance à l'amélioration en matière de sécurité. »

Cette amélioration du dossier de sécurité du CN n'est pas l'effet du hasard. Grâce à la recherche et à l'analyse des causes qui sont à l'origine des accidents, le CN a été en mesure de mettre en œuvre divers programmes visant à rendre l'exploitation ferroviaire plus sûre.

Cette année, nous consacrerons 147 M \$ à l'entretien et à l'amélioration de notre réseau ferré, soit 120 millions de plus qu'en 1993. Ces activités comprennent notamment le renouvellement de la voie et des traverses en bois, la stabilisation des pentes et le remplacement du ballast en divers endroits à l'échelle du pays.

Le TEST de sécurité

La Compagnie a mis au point un système perfectionné de détection des défauts de voie. Le système TEST, embarqué dans deux voitures ferroviaires, contrôle l'état géométrique de la voie et de la table de roulement des rails au moyen de lasers, de capteurs électroniques et de caméras. Pendant l'année, toutes les voies principales du CN sont contrôlées quatre ou cinq fois, ce qui permet de découvrir les défauts avant qu'ils ne provoquent des déraillements. De plus, des voitures de détection des défauts de rails parcourent les voies principales jusqu'à cinq fois par année afin de trouver les rails avariés et de les remplacer avant qu'une rupture ne survienne.

Le CN collabore étroitement avec les fabricants de produits chimiques et pétrochimiques dans le but de trouver de nouveaux moyens de transporter les marchandises réglementées. Il participe, en outre, à des campagnes d'information

publique à la grandeur du Canada afin de sensibiliser les collectivités locales aux questions de sécurité dans les régions où les trains du CN font partie de la vie courante.

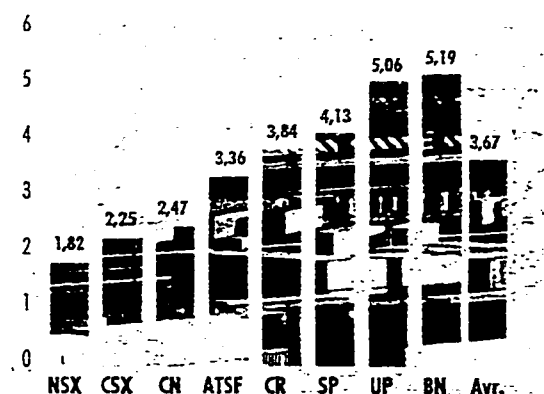
« La sécurité du personnel, la protection des marchandises et du matériel ainsi que la fiabilité du service à la clientèle revêtent une importance capitale pour le CN. À cet égard, les accidents constituent une menace et le CN d'Amérique du Nord continuera à apprendre de ses expériences et à relever les défis qui se présentent », ajoute M. McBain.

« Nous travaillons déjà pour l'hiver prochain à un plan visant à réduire les effets des grands froids comme ceux que nous avons connus aux mois de janvier et de février derniers. »

Il est pratiquement impossible d'exploiter un chemin de fer dont les trains parcourent des millions de milles sans que ne survienne un seul incident, mais le CN prendra toutes les mesures possibles pour maintenir la réputation qu'il a acquise, celle de l'un des chemins de fer les plus sûrs en Amérique du Nord.

Accidents de trains déclarés au FRA

Résultats provisoires de 1993

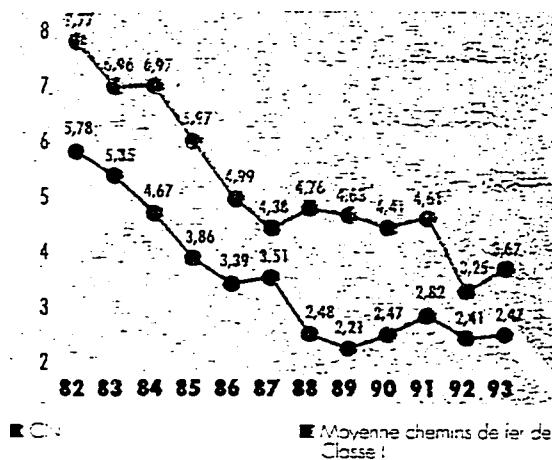


Ratio par million de milles-trains
Accidents entraînant des dommages de plus de 6 000 \$ US
à la propriété

Accidents de trains à déclarer au FRA

CN et moyenne des chemins de fer de Classe I

(Ratio par million de milles-trains)





Dialogue with the President

Intermodal partnerships with carriers and employees

The transportation industry set aside a week this month to recognize personal and industry achievements. It's also a fitting time to take stock of where we stand vis-a-vis other modes of transportation.

This year, National Transportation Week (June 5 - 11) focused on intermodal, certainly an area of our business which is growing thanks, in part, to strategic partnerships with other carriers. Through strategic partnerships with trucking companies like J.B. Hunt and KLLM in the US, and Kleyesen and Maritime-Ontario in Canada, with railroads like CSX, Conrail and

BN, and the Land Transportation Division of American President Lines, CN North America has extended its reach throughout the US and into Mexico. We are making inroads where we had no business before and the partnerships have helped us become a truly North American railway.

All modes of transportation must do more to respond to customer requirements. We must stop thinking in terms of the competition among our respective industries. We must concentrate more on how we can all work together, meshing our services better, to help our customers compete.

Because if our customers cannot compete, then neither the rail, the trucking, nor the air freight industry will be getting much business.

Intermodal is the ideal of compelling modes combining efficiencies and working together — trains carrying freight the long distances over land, ships long distances over water, while trucks work the profitable short-haul runs that will feed into the rail hubs.

We've got a modern network of rail hubs, new terminals in Vancouver and Halifax, a \$20 million improvement ongoing at Brampton, and a \$6 million improvement at Montreal.

We are committed to intermodal, and our investment in facilities and equipment attest to that. Not to mention our new St. Clair Tunnel aimed primarily at intermodal traffic, specifically double stack containers and multi-level auto carriers.

Employee partnerships

Our commitment to intermodal is expressed in human terms as well as physical assets. I'm talking about the recent labor agreement signed between Intermodal and the Canadian Brotherhood of Railway, Transport and General Workers in May.

This agreement was prompted by the need for change in our industry. While Intermodal is working closely with truckers, they still remain our main competitor — especially east of Thunder Bay.

To compete effectively, we had to get work rules more in line with our over-the-road competitors if we

wanted to increase traffic volumes and profitability.

Intermodal and the leadership of the CBRT entered into discussions to address some of these concerns, and a working group was formed to examine the labor issues as a partnership.

Negotiations intensified over the last 12 months. The agreement sets up Intermodal employees in their own seniority unit which will minimize the movement of employees between Intermodal and other departments. This, along with a comprehensive training program aimed at developing the so-called composite employee, will give Intermodal a trained, highly qualified work force with all the skills needed to meet service demands reliably and consistently.

Revisions to work rules, such as elimination on the times that shifts can be started, or the ability to use part time employees, will allow Intermodal to deploy its

trained personnel in a more productive and cost-efficient manner. Other changes will result in an overall decrease in our per-unit pick-up and delivery trucking costs without sacrificing service.

All this has been accomplished without the need for Intermodal's current employees to make concessions in the areas of wages and benefit protections. In addition, the comprehensive training program will provide Intermodal employees with the means to increase their job skills and enhance their job security.

The agreement reflects the new reality of the marketplace and the spirit of partnership we are fostering during the current round of negotiations.

■ Paul M. Tellier



Dialogue avec le Président

Transporteurs et personnel : une question de partenariat

Le secteur des transports a réservé une semaine en juin pour souligner publiquement les réalisations des personnes ou entreprises méritantes de son secteur. Nous profitons aussi de cette occasion pour faire le point et évaluer où nous nous situons par rapport à d'autres modes de transport.

Cette année, la Semaine nationale des transports (du 5 au 11 juin) a mis l'intermodal à l'honneur. Si ce secteur de nos activités est actuellement en plein essor et que CN Amérique du Nord est parvenu à étendre ses ramifications à travers les États-Unis et jusqu'au Mexique, cela vient entre autres des alliances stratégiques que nous avons conclues avec divers transporteurs : soit, chez les routiers, avec J.B. Hunt et KLM, aux États-Unis, et Kleyser et

Maritime-Ontario au Canada ; du côté ferroviaire, avec CSX, Conrail et BN et enfin, sur le plan maritime, avec la division des transports terrestres de la compagnie de navigation American President Lines. Grâce à ces partenariats, nous réalisons maintenant des percées là où nous n'étions jamais allés auparavant, devenant ainsi un chemin de fer véritablement nord-américain.

Or, de nos jours, tous les modes de transport font face à la même réalité : comme nous, il leur faut répondre aux attentes de leurs clients. Aussi devons-nous cesser de penser uniquement à nous faire la lutte, et nous concentrer davantage sur les moyens que nous avons de collaborer ensemble, de mieux harmoniser nos services et d'aider nos clients respectifs à maintenir leur

compétitivité. Car si nos clients n'arrivent pas à soutenir la concurrence, nous n'aurons plus grand chose à transporter — ni par rail, ni par route, ni par air.

En mode intermodal, les moyens de transport s'associent pour proposer ce qu'ils ont de mieux sur le plan de l'efficacité — des trains et des navires assurent les longs parcours sur terre et sur eau, tandis que les camions prennent en charge les dessertes plus courtes et rentables et viennent alimenter les plaques tournantes ferroviaires.

Nous possédons un réseau de plaques tournantes des plus modernes, avec des terminaux tout neufs à Vancouver et à Halifax, et des travaux d'amélioration en cours à Brampton (20 M\$) et à Monterrey (6 M\$).

Nous croyons fermement dans l'avenir de l'intermodal, comme en témoignent les investissements que nous faisons dans des installations et du matériel, ainsi que dans la construction de notre nouveau tunnel St. Clair qui, une fois terminé, favorisera le transport des wagons chargés de conteneurs ou d'automobiles sur plusieurs étages.

Des partenariats aussi avec le personnel

Notre engagement dans l'intermodal se manifeste non seulement sur le plan matériel, mais aussi sur le plan humain. Je fais ici allusion à la convention que les Services intermodaux viennent de conclure en mai dernier avec la Fraternité canadienne des cheminots, employés des transports et autres ouvriers.

Il devenait urgent d'apporter des changements fondamentaux dans ce secteur. Bien que les Services intermodaux entretiennent des rapports étroits avec les transporteurs routiers, ces derniers n'en restent pas moins nos principaux concurrents, tout particulièrement à l'est de Thunder Bay.

Pour accroître notre compétitivité et augmenter notre trafic et notre rentabilité, nous avons donc dû aligner nos règles de travail sur les leurs.

La direction des Services intermodaux et celle de la FCCFO ont abordé ces questions cruciales dans le cadre de discussions qui ont abouti à la formation d'un groupe d'étude chargé d'examiner les relations du travail sous l'angle du partenariat.

Au cours des douze derniers mois, les négociations se sont intensifiées. La convention a accordé au personnel de l'intermodal sa propre catégorie d'ancienneté, ce qui réduira au minimum les mutations avec d'autres services de la Compagnie. Associée à un programme de formation exhaustif qui produira ce qu'il est désormais convenu d'appeler des « employés polyvalents », cette mesure aidera à fournir aux Services intermodaux la main-d'œuvre hautement qualifiée et compétente dont ils ont besoin pour répondre aux attentes de la clientèle de façon fiable et constante.

Les modifications apportées aux règles régissant l'exécution du travail, comme l'assouplissement des heures de

prise de service ou la possibilité de faire appel à des temps-partiel, permettront aussi aux Services intermodaux de déployer leurs effectifs d'une manière plus productive et rentable. D'autres modifications amèneront une diminution globale de nos coûts unitaires de ramassage et de livraison par camion sans qu'il soit nécessaire de rogner sur le service.

Tous ces progrès ont pu être accomplis sans que les membres actuels des Services intermodaux n'aient eu à faire de concessions sur le plan du salaire ou des avantages sociaux. En outre, le programme de formation fournira aux membres du personnel de l'intermodal les moyens d'accroître leurs compétences professionnelles et de relever en conséquence leur niveau de sécurité d'emploi.

Cette convention est le reflet des nouvelles réalités du marché, mais aussi celui de l'esprit de partenariat que veut établir la présente ronde de négociation.

■ Paul M. Teller

Sometimes competitors are customers

Standing by the tunnel exit in Windsor, the rumble of an oncoming train locomotive can be felt under the feet. The train emerges and heads over CN tracks to Talbotville where it will haul away automobiles from the Ford automotive plant. The locomotives are black. They're black not because they're dirty, but because these locomotives bear the Norfolk Southern colors.

The CN/NS "Joint Section" is one joint facility of about 450 across our network where we share our assets with other railroads. This little known aspect of CN's business accounts for revenues of about \$165 M annually, excluding VIA and Montreal Commuter. Conversely, CN's use of assets belonging to other companies amounts to payments of \$45 M.

The term "Joint Facilities" applies generally to dealings with other railroads other than in the domains of linehaul revenue sharing, AAR car repairs, interswitching and car-hire. Examples of such arrangements include:

- Running rights over CN tracks
- Jointly owned track
- Switching arrangements
- Haulage of cars in the service of other railways
- Maintenance of others' tracks
- Operation of others' trains
- Inspection of cars in service of other railways
- Maintenance of others' equipment

Defraying costs

Joint use of assets makes sense when the volume of one user is not sufficient to defray fixed costs. Provision of service on behalf of another railroad makes sense when CN has the facilities in place to provide the service at a cost much lower than the other railway could achieve itself.

Specific examples include CN providing a switching service to CSXT at Samia; BN sharing CN's track between Emerson and St. James Jct, Manitoba; CN's operation and maintenance of Amtrak's Montrealeur between East Alburg, VT and Montreal; CP sharing CN's track between Toronto and Hamilton; and Conrail's use of GTW's tracks at the Port of Monroe, Detroit.

Some of CN's largest joint users include GO Transit (\$100M), CP (\$12M),

NS (\$9M), ONR (\$3M), and Amtrak (\$3M). For some agreements, no money changes hands. Compensation is in the form of service exchange. As an example, CN hauls local traffic for the Roberval and Saguenay Railway between Saguenay Power and Arvida in Northern Quebec. In exchange, R&S services CN's customers between Jonquiere and Arvida, and provides interchange switching at Arvida and Saguenay Power.

Getting a joint facility agreement up and running is a cooperative effort typically involving Joint Facility Accounting, Regional Business Planning/Research Services, Marketing and Operations. The negotiation with the other railroad is handled by the Regional Business Planning/Research Services departments and by Marketing. At CN North America this is done through the Contracts and Administration group in Pontiac, MI. The accounting for the agreements, once in place, is done by Joint Facilities Accounting in Toronto, Edmonton and Pontiac. These groups bill users and pay for CN's use of tracks belonging to other railroads according to the terms of the contracts. Joint Facilities Accounting further acts as a central resource to

regional Business Planning/Research Services and Marketing departments by keeping copies of the agreements and associated correspondence, and maintaining a data base that permits queries on relevant contract details. When negotiating with Conrail on the St. Lawrence Region for instance, this centralized function allows the region immediate access to Conrail agreements on other regions.

Long term agreements

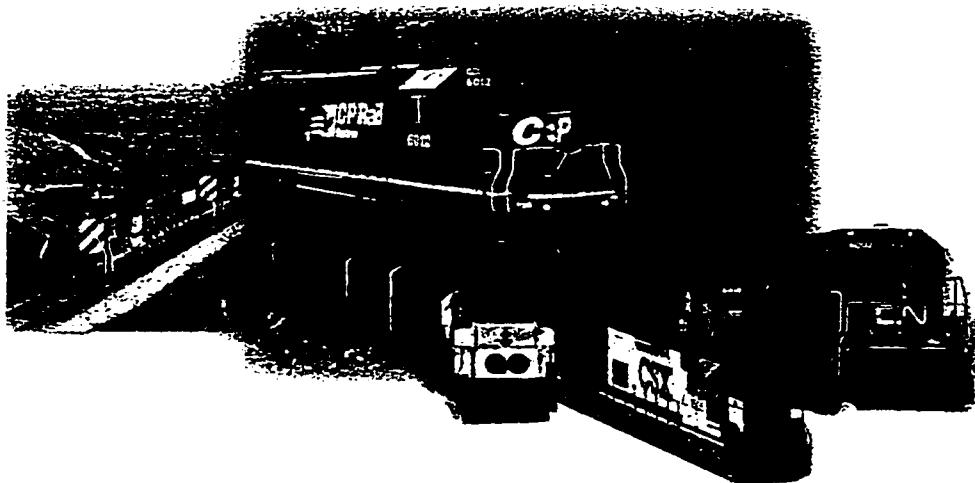
Because asset sharing has implications for future investment, many joint facility agreements are for long terms. Long term usage contracts place some of the investment risk on the shoulders of the other users. Terms of 99 years are not unusual, and there are even a couple for 999 years.

CP Rail, Norfolk Southern, CSXT, Burlington Northern, GO Transit, Conrail, and other users generate revenue for CN from our otherwise underutilized tracks. As route rationalization accelerates in Canada, joint use of tracks is expected to increase. The successes of the past prove that asset sharing can work.

■ Kevin Butt
System manager
Joint Facilities
Special to KEEPING TRACK

“Long term usage contracts place some of the investment risk on the shoulders of the other users.”

● This little known aspect of CN's business accounts for revenues of about \$165 M annually, excluding VIA and Montreal Commuter. ●



Nos concurrents sont parfois nos amis

À la sortie du tunnel, à Windsor, on peut sentir sous ses pieds le vrombissement de locomotives qui approchent. Le train qui émerge empruntera les lignes du CN à destination de l'usine Ford de Talbotville où il prendra en charge des wagons porte-automobiles. Les locomotives sont noires, non pas parce qu'elles sont sales, mais plutôt parce que cette couleur fait partie intégrante de la livrée des locomotives du Norfolk Southern (NS).

Ce tronçon utilisé conjointement par le CN et le NS n'est qu'un exemple parmi les quelque 450 installations communes situées sur l'ensemble de notre réseau que nous partageons avec d'autres chemins de fer. Cet aspect méconnu de nos activités rapporte néanmoins des recettes annuelles d'environ 165 M\$, compte non tenu des frais facturés à VIA et au réseau de trains de banlieue de Montréal. À l'inverse, les frais d'utilisation par le CN d'installations appartenant à d'autres compagnies se chiffrent à 45 M\$.

Le terme «installations communes» englobe toutes les installations qui font l'objet d'une utilisation conjointe par le CN et par d'autres chemins de fer sans pour autant toucher aux domaines suivants : partage des recettes tirées du transport de ligne, réparations de wagons conformément aux règles de l'AAR, manœuvres interréseaux et redevances d'utilisation de wagons. Les ententes en matière d'utilisation conjointe des installations peuvent porter, entre autres, sur les points suivants :

- droits de circulation sur les voies du CN
- copropriété
- manœuvres
- transport de wagons appartenant à d'autres chemins de fer
- entretien de voies appartenant à d'autres compagnies
- exploitation de trains pour le compte d'autres compagnies
- inspection de wagons appartenant à d'autres chemins de fer
- entretien du matériel appartenant à d'autres compagnies

Répartition des coûts

L'utilisation commune des installations est avantageuse lorsque le volume de trafic acheminé par un seul utilisateur ne permet pas de payer les coûts fixes. La prestation de services pour le compte d'un autre chemin de fer est également avantageuse lorsque le CN dispose des installations nécessaires pour assurer ces services à des coûts de beaucoup inférieurs à ceux que devraient assumer l'autre chemin de fer.

Voici quelques exemples à cet égard : manœuvres effectuées par le CN à Sarnia pour le compte du CSXT ; utilisation commune par le CN et le BN des lignes du CN entre Emerson et St. James Jct., au Manitoba ; exploitation et entretien du Montréalais d'Amtrak entre East Alburg, au Vermont, et Montréal ; utilisation commune par le CP et le CN des voies du CN entre Toronto et Hamilton ; et utilisation par Conrail des lignes du GTW au port de Monroe, à Detroit.

Les principaux chemins de fer avec lesquels le CN partage ses lignes sont le Réseau GO (100 M\$), le CP (12 M\$), le NS (9 M\$), l'ONR (3 M\$) et Amtrak (3 M\$). Certaines ententes prévoient une rémunération sous forme d'échanges de services. Par exemple, le CN achemine le trafic local pour le compte de la Compagnie du Chemin de Fer Roberval-Saguenay (RS) entre Saguenay Power et Arvida, dans le nord du Québec. En échange, le RS dessert les clients du CN entre Jonquière et Arvida et s'occupe des manœuvres interréseaux à Arvida et Saguenay Power.

La Comptabilité - Installations communes, les services régionaux de Planification opérationnelle ainsi que les Services de recherche, le Marketing et l'Exploitation doivent unir leurs efforts pour en arriver à une entente en matière d'utilisation commune des installations. Ce sont les services régionaux de Planification opérationnelle ainsi que les Services de recherche et le Marketing qui négocient avec

l'autre chemin de fer. À CN Amérique du Nord, cette tâche relève du groupe des Contrats et Administration de Pontiac, au Michigan. La comptabilité relative aux ententes est assurée par les groupes Comptabilité - Installations communes de Toronto, Edmonton et Pontiac, qui facturent ou paient les redevances d'utilisation aux autres réseaux, conformément aux modalités des contrats. La Comptabilité - Installations communes conserve également des copies des ententes et de la correspondance s'y rapportant, et tient à jour une base de données que peuvent consulter les services régionaux de Planification opérationnelle ainsi que les Services de recherche et le Marketing. Lorsque le personnel de la région du Saint-Laurent négocie un contrat avec Conrail par exemple, cette base de données permet d'accéder sur-le-champ aux ententes conclues avec Conrail dans les autres régions.

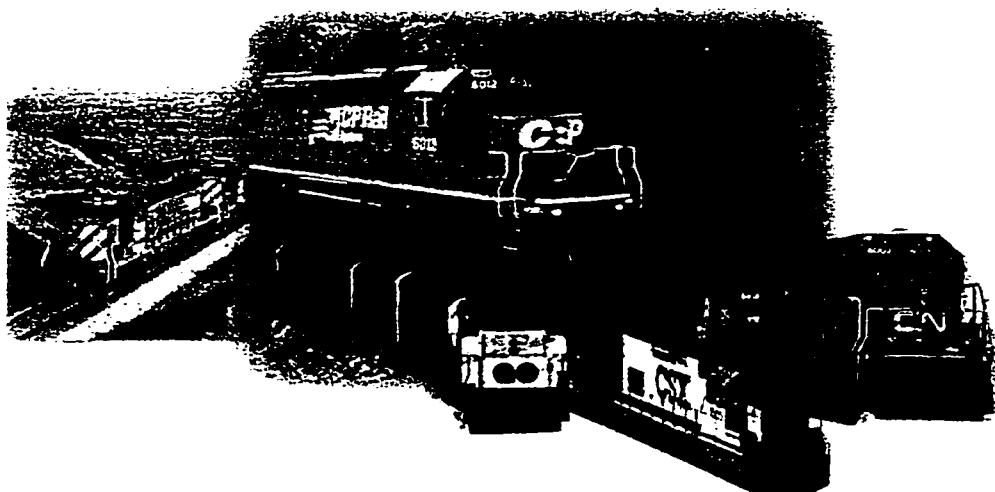
Ententes à long terme

Comme l'utilisation commune des installations a des répercussions sur les investissements futurs, de nombreuses ententes relatives aux installations communes sont de longue durée. Les contrats à long terme permettent de répartir les risques d'investissement entre les utilisateurs. Les ententes de 99 ans ne sont pas rares et certaines ont même une durée de 999 ans!

Ainsi, les chemins de fer CP Rail, Norfolk Southern, CSXT, Burlington, GO, Conrail et autres apportent des recettes au CN pour des voies qui, autrement, seraient sous-utilisées. À mesure que la rationalisation du réseau s'accroît au Canada, l'utilisation commune des voies s'accroît. En effet, l'expérience passée démontre clairement que le partage des installations est non seulement faisable, mais profitable.

■ Kevin Butt
Directeur (réseau)
Installations communes
Collaboration spéciale

« Cet aspect méconnu de nos activités rapporte néanmoins des recettes annuelles d'environ 165 M\$. »



« Comme l'utilisation commune des installations a des répercussions sur les investissements futurs, de nombreuses ententes relatives aux installations communes sont de longue durée. »



Our strategy is on target

Further to my statement when we announced the merger talks were over, I just want to briefly reiterate the main reason for a breakdown in the negotiations. In the end, CP didn't want to recognize the value of CN's assets, which in Eastern Canada is much larger than those of CP Rail. Canadian taxpayers cannot afford to make a gift of CN to CP shareholders. 'Selling out' was never an option discussed between the two railways. Finally, I laid out my bottom line and there was no way we could make a deal.

While the merger discussions were taking place, we did not sit idly by, waiting for a decision, before going on to another strategy. A merger would have provided a solution to our network and financial difficulties in the East. However, our business strategy, brought on-stream over a year ago and which we have continued to pursue since the merger talks began, is beginning to pay off.

Our second quarter profits of \$98 million are an encouraging sign that the company is on the mend financially. But, as you well know, it's still not enough to make us profitable. We need to average annual profits of \$400 to \$500 million to fund the investments necessary to meet customers' needs, and to maintain the price competitiveness of their products on world markets. To attain that level of profit demands our continued attention to lowering costs and improving service standards.

We must focus on growing our business, on improving the way we do business, and on being competitive. Despite the present unstable climate in our industry, there is enough business out there. We have to go after it and be able to deliver what we promise to our customers. However, changes have to occur.

Too much track is one of our major problems. In the special four page insert with this issue of KEEPING TRACK, Terry McManaman explains the shedding process we have to undergo of our unprofitable lines, and how rail rationalization is a key to our renewal.

Our strategy also includes large-scale and widespread cost reductions, strategic alliances to improve north-south traffic flows, and the investments mentioned above to dramatically improve the quality and reliability of our service and to increase our strength in handling import and export traffic. Workforce reductions announced at the outset of our business plan will also continue. The result will be a strong and stable railway that provides competitive service and secure, long term jobs for the remaining employees.

If nothing else, the merger discussions have made everyone — employees, our customers, the public and the government — more aware of the problems the Canadian rail industry faces in the form of taxes, tough competition with truckers and other railways, and oversized track networks. It's critical that we get on the right path and drive our agenda quickly. We have to get results and it depends on our willingness to make things happen.

I welcome your comments.

■ Paul M. Tellier



Notre stratégie porte fruit

J'aimerais vous dire quelques mots de plus sur la fin des pourparlers de fusion et la principale raison de leur achèvement. Le CP ne voulait pas reconnaître, à la fin des négociations, la valeur des actifs du CN. Nos actifs dans l'Est canadien valent beaucoup plus que ceux de CP Rail. J'estime que les contributeurs canadiens ne peuvent se permettre de faire cadeau du CN aux actionnaires du CP. La «liquidation» n'a jamais été à l'ordre du jour des deux chemins de fer. J'ai fini par mettre les cartes sur la table et il s'est avéré qu'une entente était impossible.

Nous ne sommes pas restés oisifs pendant les négociations, dans l'attente d'une décision. Nous avons élaboré une stratégie de rechange. Il est certain que la fusion aurait été une solution aux difficultés financières et de surcapacité du réseau dans l'Est. Cependant, la stratégie commerciale que nous avons commencée à appliquer il y a un an — et qui s'est poursuivie pendant les négociations — commence à rapporter.

En effet, le bénéfice de 98 M \$ que nous avons déclaré au deuxième trimestre est encourageant. C'est signe que la Compagnie est sur la bonne voie financièrement. Mais, comme vous le savez bien, ce bénéfice est insuffisant pour faire du CN une entreprise rentable. Il nous faut chaque année un bénéfice

moyen de 400 à 500 M \$ pour financer les investissements nécessaires à la satisfaction des besoins de nos clients et au maintien de la compétitivité tarifaire de leurs produits sur les marchés mondiaux. Pour atteindre un tel niveau de bénéfice, nous devons chercher, sans relâche, à réduire nos coûts et à relever nos normes de service.

Nous devons penser expansion commerciale, amélioration de nos pratiques commerciales et accroissement de notre compétitivité. Malgré l'instabilité qui s'est installée dans notre secteur, les occasions commerciales ne manquent pas. Nous devons les rechercher. Nous devons livrer la marchandise. Des changements s'imposent toutefois.

Il y a trop de voies, c'est là un de nos gros problèmes. Dans le supplément de quatre pages au présent numéro d'Au Fil du Rail, Terry McManaman explique le processus de délestage que nous devons entreprendre à l'égard de nos lignes non rentables, et comment la rationalisation du réseau sera la source de notre renouveau.

Notre stratégie comporte aussi des réductions de coûts massives et générales, des alliances stratégiques destinées à améliorer les mouvements de trafic nord-sud, de même que les investissements dont je vous ai parlé plus haut afin d'améliorer grandement la qualité et la fiabilité de notre service et d'accroître notre assise dans l'import-export. Les compressions d'effectif annoncées dans notre plan d'entreprise se poursuivront également. Notre chemin de fer y gagnera stabilité et vitalité. Il sera en mesure d'offrir un service concurrentiel et d'assurer des emplois à long terme aux employés qui resteront.

Les pourparlers de fusion auront eu comme effet, entre autres, de sensibiliser davantage le personnel, notre clientèle, le public et le gouvernement aux problèmes du secteur ferroviaire canadien : fiscalité, vive concurrence provenant des entreprises de camionnage et des autres réseaux ferroviaires, et voies en surnombre. Il faut absolument que nous nous positionnions bien et que nous passions rapidement aux actes. Il nous faut des résultats. Tout dépend de notre détermination.

J'attends vos commentaires.

■ Paul M. Teller

Process improvement: from philosophy to practice

In the midst of changing outside influences and time constraints that are also in a constant state of flux, we are trying to get on with our business and improve the way we do it. If there is anything which remains constant, it is the pressure to deliver a better quality product, in a shorter amount of time, and at a smaller cost. There is hope, however, in the shape of five new CN initiatives.

These will consist of improving five key processes: service recovery planning, service plan modification, determining car supply, US custom clearance, and reduction in damage to perishable goods. How can this help us? "Process improvement attempts to

coordinate the work at all levels to ensure the best possible overall operation of a system," says Rand Ayers, director - Process Quality, Quality and Human Resources.

It sounds simple enough but if you think about it, there is something new here. When the average person thinks of quality, for example, they tend to think in terms of workmanship and the perfection of a craft. This of course is an important part of delivering a quality product, but it isn't the whole story; the most critical element of quality is figuring out what our customers' specific needs are, and meeting those needs.

The customers need their goods delivered safely and on time. For the customers to get what they need, we have to provide a complete service — siding to siding. This involves a chain of hand offs and a lot of people. If a chain is only as strong as its weakest link, then our process is just as good as its weakest hand off.

It is estimated, in industry circles, that as many as 90 per cent of service failures are due to bad process, not bad people. Although those statistics were not taken directly from CN, they might as well be. You just cannot deliver a quality product without quality processes. "No individual can succeed at satisfying the customer on

their own," says Ayers. "They must be supported by good processes."

What this means, is that accomplishing each successful hand off can only be done if all the other steps in the process are adequate. "One thing we always encounter when we map a process," explained Ayers, "is that no individual really has an idea of how a whole process unfolds from A to Z, hence no one person really understands how to fix the disconnects."

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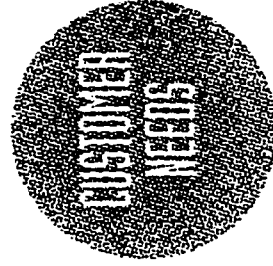
Process improvement: from philosophy to practice

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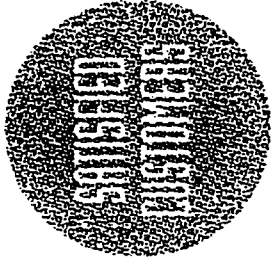
Identifying these "disconnects", or problem areas, is key. Often, there is work overlap, re-work, or work which, although helps one hand off, creates problems in another; once these are found, the hard work of process re-mapping begins. Knowing the problem is only half the battle, fixing it is another story. "That is when we need to be very creative," said Ayers, "and this is the stage at which we can benchmark what other companies are doing."

What is especially rewarding is that the benefits from this kind of thinking can be felt quickly. Under good conditions the entire process revision takes approximately 12 weeks — from conception to the beginning of implementation — so we should be experiencing the benefits from the five above-mentioned initiatives as early as this fall. The benefits? Efficiency and productivity go up, time spent on problem solving

INPUT



OUTPUT



To improve a process, and in turn, process outputs, changes must be made with the customers' needs in mind.

goes down. This also means job stress is alleviated, because deadlines are more easily met, and customer needs are better satisfied.

In the language of process, outputs are what we are concerned with. Is the customer satisfied with our output? As our Customer Satisfaction Surveys keep reminding us, output isn't just moving our customers' goods anymore, it means meeting the full needs of

those customers as well, with reliability, and accurate way-billing among other things. To improve that, we have to coordinate our efforts cross-company. "Process cuts across organizational units, and this can lead to communication barriers," said Ayers. "Process improvement is crucial in eliminating those barriers."

There has been endless talk about change and continuous improvement. We all know that change is a way of life now. So how can a large organization, like CN, cope with constant change? The answer is to turn the organization into an adaptive system and Rand Ayers thinks he knows how. "Every employee has two jobs: their first job is to execute their work consistently, their second job is to change their process by improving it."

Hence, an important strategy for continuous improvement is process revision. "This strategy," emphasizes Ayers, "is one that we can definitely identify as a key factor in our turnaround and staying power."

Amélioration de nos façons de faire

Tirillés par les contraintes de temps et les multiples influences extérieures qui nous assaillent, nous continuons de vaquer à nos affaires et de chercher des moyens de nous améliorer. Seule constante dans cette tourmente : la pression de devoir toujours livrer un produit de meilleure qualité en moins de temps et à moindre coût qu'avant. Mais, rassurons-nous, cinq initiatives lancées par le CN viendront bientôt à notre rescousse.

En fait, ce sont cinq processus clés de l'entreprise qu'on cherche à améliorer : la planification de la remise en service après désastre, la modification du plan de service, la détermination de l'offre de matériel remorqué,

le dédouanement à la frontière américaine et la réduction des avaries aux denrées périssables.

Mais en quoi agir sur ces secteurs nous rendra-t-il la tâche plus aisée? «L'amélioration des processus, répond Rand Ayers, directeur Qualité des processus de travail, au service Qualité et ressources humaines, vise à coordonner l'intervention, à tous les niveaux, afin d'optimiser le fonctionnement du système dans son ensemble.»

Au premier coup d'oeil, rien de vraiment nouveau, mais regardons de plus près. Lorsqu'on pense à la qualité, on pense généralement à la fabrication soignée, à la perfection de la technique et du

produit. Certes, la qualité de l'exécution joue pour beaucoup dans la fourniture d'un produit de qualité, mais il y a plus. D'abord et avant tout, il a fallu déterminer ce dont le client avait besoin pour ensuite y répondre.

En ce qui nous concerne, nos clients attendent de nous que nous achevions leurs produits sans les endommager et dans les délais convenus. Pour ce faire, nous devons leur fournir un service complet, d'embranchement à embranchement, avec tous les intermédiaires que cela suppose, et ils peuvent être nombreux. Si l'on dit d'une chaîne qu'elle n'est aussi forte que le

plus faible de ses maillons, alors on peut dire de la même façon d'un processus d'acheminement qu'il n'est aussi fort que le plus faible de ses éléments.

On estime, dans les milieux industriels, qu'au moins 90 pour cent des pannes ou des interruptions de service sont attribuables à de mauvais processus et non à des erreurs humaines. Ces statistiques ne viennent pas du CN, mais c'est tout comme si. On ne peut livrer un produit de qualité sans faire intervenir des processus de qualité. «Personne n'est en mesure de satisfaire, de lui-même, tous les besoins du client, dit M. Ayers. Nous devons pouvoir nous appuyer sur de bons processus.»

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Amélioration de nos façons de faire...

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Autrement dit, pour réussir le passage d'un élément de la chaîne au suivant, toutes les étapes du processus doivent être appropriées et s'enchaîner dans un ordre logique et harmonieux. «Or, la seule chose dont nous soyons certains au moment de schématiser un processus, explique-t-il, c'est qu'il n'y a personne, dans son isolement, qui est à même de voir l'ensemble. Il n'y a donc personne qui sait non plus comment réparer les ruptures qu'il pourrait y avoir dans la chaîne.»

L'identification de ces ruptures ou dysfonctionnements, comme on les appelle, constitue déjà une bonne partie de la solution. Il y a souvent du chevauchement, du double emploi ou des activités qui, tout en aidant à l'exécution d'une tâche, peuvent nuire à l'exécution d'une autre. Une fois ces dysfonctionnements repérés, le plus gros du travail consiste à réorganiser le processus au grand complet. Identifier le problème ne représente que la moitié du travail ; reste à présent à le régler. «C'est alors qu'il nous faut faire appel à notre

créativité, dit M. Ayers, et nous fixer des repères en regardant comment font les autres compagnies.»

Ce qu'il y a de particulièrement gratifiant dans un exercice comme celui-là, c'est que les progrès ne tardent jamais à se manifester. Effectué dans de bonnes conditions, le processus de révision des processus prend environ 12 semaines, depuis sa conception jusqu'à sa mise en oeuvre — si bien que nous devrions commencer à voir les retombées de nos cinq initiatives dès cet automne. Et quelles seront ces retombées? Hausse d'efficacité et de productivité et baisse du temps consacré à régler les problèmes, d'où baisse du stress,

faciles à respecter et les clients, plus faciles à satisfaire. Ce qui doit nous intéresser avant tout, c'est le produit, «l'ex-trant» comme on dit dans le jargon. Le client est-il satisfait de notre extrant? Comme nos sondages sur la satisfaction de la clientèle ne cessent de nous le rappeler, notre extrant ne se résume pas à transporter la marchandise du client d'un point A à un point B. Encore faut-il que nous répondions chez lui à un besoin et que nous le fassions de manière fiable et, entre autres, sans nous tromper au moment de le facturer. Pour nous améliorer à ce chapitre, nous devons coordonner notre action à l'échelle de la Compagnie.

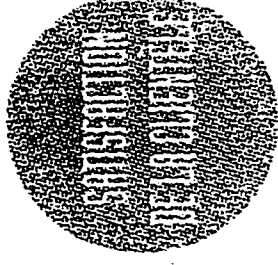
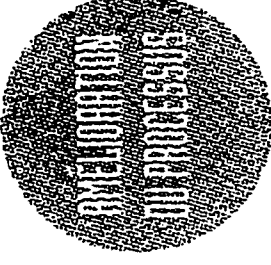
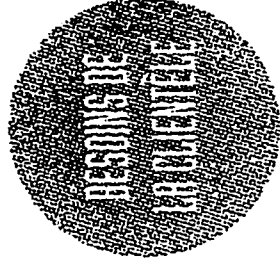
«Comme les processus de travail recourent parfois plusieurs unités organisationnelles, nous rencontrons souvent des obstacles dans la chaîne de communication, dit M. Ayers. L'amélioration des processus vise essentiellement à les faire sauter.»

Le changement et l'amélioration continue font désormais partie de notre quotidien. Alors comment une entreprise de la taille de la nôtre peut-elle s'adapter au changement? En se transformant en une organisation évolutive. Rand Ayers pense

savoir comment. «La tâche de chaque membre du personnel devrait comporter deux volets : le premier serait d'avoir de la constance dans son travail, et le second, de chercher constamment à l'améliorer.»

Par conséquent, l'une des stratégies fondamentales de l'amélioration continue doit passer par la révision de nos processus. «Cette stratégie, nous en avons la certitude, sera la clé de notre redressement, de notre progrès et de la consolidation de notre position.»

INTRANTS



EXTRANTS

Pour améliorer un processus, et par conséquent ses extrants, il faut penser aux besoins des clients.



Dialogue with the President

Above and beyond

One of the most satisfying experiences in anyone's life is the first time you buy a car, a house, or a sound system. You shop around, check out different models, compare prices, choose options. You're the customer and you decide what you want — you define what quality is.

At CN, we could work together to come up with a definition of quality that would inspire every employee in the organization to run the best railroad in the world. But none of that would matter if our definition didn't match what our customers need out of a railroad.

Within the railway industry, we must concern ourselves with a number of complex and vitally important organizational, operational and logistical challenges. We improve our infrastructure. We apply new technology. We keep our trains running. We administer payroll accounts and produce advertising. That's all part of our job and that's what we're paid to do.

But none of us should ever forget that we work on these things for one reason: to deliver quality customer service to our customers.

Our customers have told us how they define quality. They want to be able to get their products to their customers on time. They want to know where their shipments are. They want us to schedule our services and be able to stick to our timetables. They want us to notify them about delays. And they care about how much we're going to charge them.

Change is taking place. Productivity is up and our processes are being streamlined. It takes hard work to get things done, but at every level, committed employees have taken up the challenge to go above and beyond the call of duty. They've been looking for possible ways to cut costs, laboring to increase productivity, going the extra mile to provide the best customer service, and dedicating themselves to the advancement of their employees.

Among other efforts, Quality Action Teams and Process/Service Improvement Teams are active throughout the company, determining how we measure up to our customers' needs. Some work for their internal customer, others for external customers. They know that individuals can and do make a difference.

Every October, companies throughout North America celebrate Quality Month. CN does too. This year, our celebrations will be marked by the presentation of the President's Awards for Excellence, which include a quality category.

These awards will honor exceptional individual employees or teams who have pushed themselves to the limits of excellence, who have shown the initiative, the positive attitude, and the team work needed for this company to excel. No matter how you look at it, quality is not a once a year thing; it must be a year-round process. This program, too, will be an ongoing process.

As for those of you who are nominated by your co-workers for an award, go ahead and take a bow, for your efforts have not gone unnoticed. And thanks.

■ Paul M. Tellier



Un peu plus haut, un peu plus loin

ous vous souvenez de votre premier gros achat (voiture ou maison)? Vous aviez fait le tour des vendeurs ou des agents, comparé les modèles, calculé les prix, fait votre choix d'options. Vous aviez vraiment la sensation d'être client et la satisfaction de pouvoir dicter vos volontés, de définir la qualité dans vos propres mots.

Je suis certain que tout le monde a sa propre définition de la qualité. Ce qui compte toutefois, c'est d'avoir la même définition de la qualité que notre clientèle et de bien comprendre ce qu'elle attend d'un chemin de fer.

Des défis aussi complexes que vitaux — d'organisation, d'exploitation et de logistique — se posent au CN. Pour les relever, nous améliorons, nous innovons, nous investissons dans de la technologie et nous maintenons nos trains en circulation. Tout cela fait partie de notre travail et c'est pour cela qu'on nous paie.

Mais aucun d'entre nous ne doit jamais oublier la raison d'être de son travail. Et cette raison, c'est la prestation d'un service de qualité.

Nos clients nous ont donné leur définition de la qualité. Nous savons ce qu'ils veulent. Ils veulent livrer à temps leurs produits à leurs propres clients. Ils veulent savoir où se trouvent leurs expéditions. Ils veulent un service régulier et ponctuel. Ils veulent être prévenus des retards. Et ils veulent savoir d'avance combien ce service va leur coûter.

Les choses se mettent à bouger au CN. Notre productivité est à la hausse et notre structure s'allège. On remarque de plus en plus, qu'à tous les niveaux, des membres du personnel recherchent l'excellence. Ils sont à l'affût des moyens de réduire nos coûts, attentifs aux façons d'augmenter la productivité, prêts à faire un pas de plus pour offrir aux clients le meilleur service possible, et soucieux de favoriser eux-mêmes la progression de leurs employés.

Comme tant d'autres, les membres des équipes d'action qualité et d'amélioration des processus et des services s'efforcent de mesurer la satisfaction de la clientèle, qu'elle soit interne ou externe. Ils savent aussi quelle riche contribution l'ensemble du personnel pourrait apporter au CN.

Chaque année, le mois d'octobre est consacré mois de la Qualité dans les entreprises nord-américaines. Au CN également. Le clou de nos célébrations cette année sera la remise des Prix d'excellence du Président. Ceux-ci comprennent d'ailleurs une catégorie qualité.

Par ces prix qui seront dorénavant remis chaque année, nous rendrons hommage à des personnes ou à des équipes animées par le souci de l'excellence, le sens de l'initiative, l'attitude positive et l'esprit d'équipe dont l'entreprise a besoin. La qualité, tout comme l'excellence, exige de la continuité.

Je termine par un mot à l'intention de ceux et celles qui ont été ou seront mis en nomination par leurs collègues : tenez bon! Vous pouvez être fiers de vous ; vos efforts ne sont pas passés inaperçus. Et surtout, merci.

■ **Paul M. Teiller**

New intermodal terminal opens in the state of Maine The Auburn Terminal — catching the wave of the future

About a year and a half ago, a joint study team formed by CN, and the St.

Lawrence and Atlantic Railway (SLR) began looking at solutions to what then was SLR's main problem: over the last couple of years its business had been typically carload, and was no longer able to meet all the needs of the shippers in that marketplace. One of the solutions was to diversify the SLR's traffic base in order to meet those needs. The culmination of that study took place on July 19, 1994, in the form of a groundbreaking ceremony. The ceremony was to kick off the implementation of a long awaited project: the Auburn Intermodal Terminal, in Auburn, Maine, that will be jointly operated by CN and the SLR (see map on page 3).

The ceremony broke ground in more ways than one, as Dan LeBlanc, director - Strategic Development, Intermodal, puts it, "it is one that is unique. From a North American perspective, it is the first intermodal terminal

to have such a large involvement at the state and local level. This project could not have happened if it were not for the state of Maine's participation. Furthermore, this is really a story about a big railway (CN) and a

shortline (SLR) working together to improve north-south traffic flows." But will this story have a happy ending? "From the very beginning," affirmed Dan, "this has been a growth business initiative. We expect not only to see more

shipments from existing customers, but to see new customers come on board with this service — a service that will increase our revenues while providing a top-notch service to our customers.

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"All the elements of service, cars, intermodal units, or drayage, have been examined so that we are indeed starting with a top notch facility," says Dan. And an important element to that top notch service is that all of the tracing and monitoring will be done using CN technology. In fact, it will be a mirror image of a CN facility, employing the state of the art systems used by CN Intermodal.

Another key element to its fast and easy service is that the Auburn Terminal will lie within two miles of a major artery, Maine Interstate 495. The Auburn Terminal will place CN in the heart of Maine's bustling pulp and paper industry, but, as Dan LeBlanc explains, "we should also be able to service customers from as far away as Boston on some in-bound products. Maine, Southern New Hampshire, and Eastern Massachusetts will be the target markets for this terminal."

According to Dan LeBlanc, the customers are already biting. "We anticipate that on the first day of operations we are going to have a good running start at a full train. We really have the opportunity to deliver a product directly in line with what the marketplace requires. Not only for the benefit of our producers and shippers, but to a significant community of potential trucking partners."



From the trucking community perspective, there is a growing trend to use the intermodal system for the longer hauls. Though intermodal service will never replace long distance hauling, the Auburn Terminal offers a timely alternative.

Not only are local truckers interested in performing the pick up and delivery services, but some larger companies have also shown an interest in moving their units by rail.

The Auburn Terminal will be proof positive that the trucking companies can be successfully turned into allies and customers. If one can say that intermodal is the wave of the future in the transportation industry, then we can also proudly affirm

that CN has caught this wave early, and is leading the pace. "Intermodal has been and continues to be," confirms Dan LeBlanc, "the fastest growing segment of

the railroad business. I think that the long-term outlook for intermodal is positive, and that the new terminal in Maine will live up to its promise."

On se prépare pour l'avenir

Un nouveau terminal intermodal ouvrira ses portes à Auburn

Il y a environ un an et demi, un groupe d'étude conjoint formé de représentants du CN et de la St. Lawrence and Atlantic Railroad (SLR) se penchait sur l'avenir de ce chemin de fer secondaire.

Au cours des années, le SLR s'était spécialisé presque exclusivement dans le transport par wagons classiques, et il n'était plus à même de répondre aux besoins nouveaux des expéditeurs. Pour prospérer dans ce marché, il lui fallait absolument diversifier ses prestations.

Un plan d'action a donc été mis en oeuvre, et le 19 juillet 1994, on levait la première pelletée de terre marquant le début des travaux de construction du terminal intermodal d'Auburn, dans le Maine. Ce terminal, qui sera exploité conjointement par le CN et le SLR, était attendu depuis fort longtemps.

Ce projet est unique à plus d'un chapitre, précise Dan LeBlanc, directeur Conception stratégique Intermodal : «Il est le premier en Amérique du Nord à bénéficier d'un tel engagement à l'échelle locale et de l'État. Le terminal en effet n'aurait pu voir le jour sans la participation de l'État

du Maine. Mais surtout, il constitue un bel exemple de collaboration entre un grand chemin de fer (le CN) et un chemin de fer secondaire (le SLR) dans le but d'accroître les trafics nord-sud».

Une collaboration qui, selon M. LeBlanc, est promise à un bel avenir. «Depuis le tout début, il s'agit d'un projet de croissance. Grâce à ce service, nous prévoyons obtenir plus de trafics de nos clients actuels, mais aussi élargir notre clientèle.

Nous serons en mesure d'augmenter nos recettes tout en rehaussant la qualité de nos prestations.»

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d'exploitation avec des installations de premier plan», ajoute Dan LeBlanc. En outre, les opérations de repérage et de suivi des envois seront effectuées au moyen de la technologie du CN. Le terminal tirera donc parti des systèmes de pointe du service de l'Intermodal, et ressemblera comme un frère aux terminaux modernes du CN.

Et les clients cognent déjà à la porte. « Nous prévoyons que, dès le premier jour d'activité, nous connaîtrons un bon départ et traillerons un train complet. Nous fournirons un service qui correspond exactement aux exigences du marché pour le plus grand bénéfice de nos producteurs et expéditeurs, mais pour celui également d'un important groupe de camionneurs, appelés à devenir nos partenaires. »

Le terminal d'Auburn fera la preuve que les entreprises de camionnage peuvent devenir des alliés et des clients. L'intermodal est la voie de l'avenir dans le secteur des transports, et le CN peut affirmer avec fierté qu'il en est l'un de chefs de file. Ce que confirme Dan LeBlanc.

«L'intermodal a été et continue d'être l'élément qui connaît la plus forte croissance dans le transport ferroviaire. Je pense que les perspectives à long terme sont positives et que le nouveau terminal du Maine remplira ses promesses».



Speaking of results...

The progress we are making in the implementation of our aggressive plan of change and renewal is largely due to the hard work of CN employees across North America. Although we are all aware that much work remains, it is our combined commitment to excellence that is beginning to pay dividends.

October, as many of you know, is International Quality Month, and it is fitting that employees from Halifax to Chicago to Vancouver took time out to celebrate its importance. Special events occurred system-wide, bringing employees together in a show-and-tell environment. By sharing our experiences, we learned how each of us in our own way, brings particular talents to our work. What unites us is our desire to do the best we can.

Quality, of course, takes many forms. Family Day celebrations, for example, at Montreal's Taschereau Yard were enormously successful. More than 8,000 employees and their families took part in the planned events and toured the yards. Now that's a quality turn-out. I wish to thank the organizing committee as well as countless volunteers for their enthusiasm and for a job well done, and encourage other regions to sponsor similar events.

Our results for the third-quarter of 1994 are another quality achievement. Net income for the nine-month period ending September 30, 1994 amounted to \$186 million compared with a net loss of \$41 million in the corresponding period of 1993. Net income of \$86 million for the third quarter was an improvement of \$95 million compared to the same period in 1993.

All of us should take pride in these results. They reflect in part the overall improvement in the economy that led to higher volumes, particularly in Canadian rail operations. They also reflect our success in controlling costs, improving productivity and increasing revenues.

One of the ways in which we are demonstrating our commitment to becoming customer-driven is the reorganization of our marketing department into six business units, focusing on key customer groups. Each unit will have a team of account managers, who will provide customers with a single point of contact within CN.

The changes are a direct response to input from our customers, and our ultimate goal is to anticipate their needs. Account managers will not only be knowledgeable about our products and services, they will be entrepreneurs and problem solvers as well. The added benefit is that account managers will quickly become customer champions within CN.

I expect that our commitment to quality will continue to reap rewards in the months and year ahead. By becoming financially stable and reliably profitable, CN will allow its shareholder — the Government of Canada — to explore different ownership options. It is not too early to begin studying the various scenarios, and it is for this reason that I welcome the Minister of Transportation, the Honourable Doug Young's decision to ask a Parliamentary Committee to study this issue. My understanding is that the Task Force will be crisscrossing the country, seeking input from shippers, consumers, citizen groups, provincial and municipal governments, and, of course, the railway industry itself. They will be looking at options ranging from the status quo to commercialization.

I am also pleased that in establishing the Task Force's mandate, the Minister underlined the importance of having employee participation in any commercialization venture. For it is you — the employees of CN — and your commitment to quality — that have made CN the great company it is today.

With your assistance, we will not only build on the record results of the third quarter but also continue to support each other in the quest for excellence. Together, we will help our customers compete in their end markets.

En parlant de résultats...

C'est largement grâce aux efforts et au travail acharné de tout le personnel de CN Amérique du Nord que notre audacieux plan de changement et de redressement commence à porter fruit. Il nous reste, bien sûr, encore beaucoup à faire, mais notre quête de l'excellence donne déjà des résultats concrets.

Octobre est le mois international de la qualité et de nombreux membres du personnel, de Halifax à Chicago, à Vancouver, ont pris le temps d'en célébrer l'importance. Des événements spéciaux ont eu lieu dans tout le réseau. Ce genre d'échanges nous permet de profiter des expériences et des talents des autres, et d'être solidaires dans notre désir de faire toujours mieux.

La qualité se manifeste de diverses façons. La Journée de la famille au triage Taschereau à Montréal, par exemple, a remporté un énorme succès. Plus de 8 000 employés et membres de leurs familles ont visité les installations et participé à des jeux. Voilà un événement de qualité! Je désire remercier le comité organisateur de même que les innombrables bénévoles pour leur enthousiasme et leur travail, et je saisis l'occasion pour encourager les autres régions à parrainer ce genre d'activités.

Nos résultats pour le troisième trimestre de l'exercice sont une autre réalisation de qualité. Le bénéfice net pour la période de neuf mois close le 30 septembre 1994 s'est élevé à 188 M\$ par opposition à une perte nette de 41 M\$ à pareille date en 1993. Le bénéfice net de 86 M\$ pour le troisième trimestre est en hausse de 95 M\$ par rapport à la période correspondante de 1993.

Nous pouvons tous être fiers de ces résultats. Même si l'amélioration générale de l'économie a suscité une hausse des volumes, en particulier des activités ferroviaires canadiennes, nos résultats reflètent aussi nos progrès au chapitre du contrôle des coûts, de l'amélioration de la productivité et de l'accroissement des recettes.

La restructuration de notre service Marketing en six groupes commerciaux articulés autour de groupes-clients clés est un signe de notre engagement à devenir une entreprise vouée à la satisfaction de la clientèle. Dans chaque groupe, des directeurs et directrices de compte agiront comme personnes-ressources uniques auprès des clients. D'ailleurs, ces changements concrétisent directement les souhaits qu'ils nous ont exprimés. Notre but ultime est d'aller au-devant de leurs besoins. Les directeurs et directrices de compte n'auront pas seulement une connaissance approfondie de leurs produits et services, mais ils assumeront également le rôle d'entrepreneurs, capables de résoudre tous les problèmes à mesure qu'ils se présentent. Ce faisant, les directeurs de compte se feront rapidement les défenseurs de leur clientèle au CN.

Dans les mois qui viennent, nous continuerons de récolter les fruits de notre engagement à l'égard de la qualité. Une stabilité financière et une rentabilité continue de notre entreprise permettront à notre Actionnaire, le gouvernement canadien, d'explorer différentes formules de propriété pour le CN. Il n'est pas prématuré d'entreprendre l'étude de divers scénarios.

J'accueille donc avec plaisir la décision du ministre des Transports, l'honorable Doug Young, de confier un tel mandat à un groupe de travail parlementaire. Ce groupe sillonnera le pays pour solliciter l'avis des expéditeurs, des consommateurs, des groupes de citoyens et des administrations provinciales et municipales et, naturellement, du secteur ferroviaire lui-même. Il dressera une liste de tous les types d'options, allant du statu quo à la commercialisation.

Je souscris également au désir du ministre de faire participer le personnel à tout effort de commercialisation. Après tout, c'est grâce à vous tous et à votre engagement à l'égard de la qualité que le CN est devenu la grande entreprise qu'il est aujourd'hui.

Avec votre aide, nous ferons plus qu'enregistrer des résultats records comme ceux du troisième trimestre, nous continuerons à nous appuyer mutuellement dans notre quête de l'excellence. Ensemble, nous aiderons nos clients à livrer une concurrence efficace sur leurs propres marchés.

Sharing the fruits of our labor

Almost 18 months have passed since CN began to focus on its turn-around strategy of reducing costs, increasing financial results and improving the level of customer service. Since then, the concerted efforts of many thousands of CN employees have led to measurable progress and substantial improvements.

In an employee communique sent out system wide on September 15, Paul M. Tellier announced that "CN's financial results for the first quarter indicated that we had achieved a break-even position." He went on to say that "thanks to the contribution and hard work of everyone, the financial results to date continue to improve."

Mr. Tellier believes that employee compensation should be linked to financial results. And now that CN's financial results are finally reflecting the fruits of our labor, he has announced that 1995 will bring about the implementation of a new incentive plan covering

all non-schedule and management employees. "The plan is based on a number of performance indicators and reflects the future direction regarding compensation for all non-schedule employees," he said.

Mr. Tellier advised that "Informal consultations have taken place with union leaders to explore introducing a similar plan for scheduled employees." He emphasized that "CN is ready to discuss with the union leadership such a possibility."

In a commitment to CN employees, Mr. Tellier has promised that if financial results continue to reflect positive growth throughout the remainder of 1994, a payment will be awarded to non-schedule and management employees at year end in an effort "to recognize your sustained efforts and contribution in a tangible way," he acknowledged.

KEEPING TRACK will publish the details of the 1995 incentive plan when they are made available.

Le CN et son personnel

Un même effort, une même réussite

Il y a presque 18 mois que le CN a adopté sa stratégie de revirement. Depuis, grâce aux efforts soutenus de tout le personnel pour réduire les coûts, exploiter de nouveaux débouchés et améliorer le service à la clientèle, nous constatons pour l'année en cours une amélioration sensible de notre rendement.

Le 15 septembre dernier, dans un message transmis à tous les membres du personnel du réseau, **Paul M. Tellier** rappelait que nous avons réussi, au premier trimestre, à atteindre le seuil de la rentabilité. «Depuis, grâce à la collaboration et à l'excellent travail de chacun et chacune d'entre vous, notre rendement financier continue de s'améliorer», a-t-il ajouté.

M. Tellier estime que la rémunération du personnel doit être étroitement liée aux résultats financiers de la Compagnie. Il a donc annoncé la mise en oeuvre, en 1995, d'un régime d'intéressement à l'intention de tous les membres du personnel cadre et non syndiqué. «Votre

rémunération sera en rapport direct avec le rendement de l'entreprise, a-t-il précisé. Établi en fonction d'un certain nombre d'indicateurs de rendement normalisés au sein de l'industrie, ce régime traduit bien notre orientation future en matière de rémunération du personnel non syndiqué.»

À l'occasion d'entretiens informels, le CN a aussi consulté les dirigeants syndicaux sur la possibilité d'instaurer un programme semblable pour les employés syndiqués. Il est prêt à discuter sérieusement de cette possibilité avec les syndicats.

Toutefois, M. Tellier ne veut pas attendre toute une année pour reconnaître la contribution du personnel. «Si nos résultats financiers poursuivent leur remontée, nous accorderons dès la fin de l'année 1994 une prime à tous les membres du personnel cadre et non syndiqué», a-t-il déclaré.

AU FIL DU RAIL publiera tous les détails du régime d'intéressement pour 1995 dès qu'il seront disponibles.



Ending the year in high style

As we come to the end of another year, and I look back on how far we've come, I want to say thank you. Thank you for believing that together we could begin to turn this company around.

I congratulate each and every one of you for the positive outlook you have adopted, for the imaginative approach you have taken in your work and for the tremendous effort you have shown as a team member in the rebuilding of this company.

We have undertaken the most ambitious program of change and renewal in the history of Canadian railways and CN's ultimate goal is to become a financially stable and more reliably profitable company.

The success of our efforts were measured in the third quarter financial results — \$186 million profit for the first three quarters and a net income for the third quarter of \$86 million. I am confident that this trend will continue and that we will record an impressive profit this year.

Our revenue ton miles for the year have reached new records at the end of our third quarter — 11% above 1993. And as measured by expenses per gross ton mile, productivity is up by more than seven per cent; that's the equivalent of a \$70 million cost reduction.

At CN, we needed to reshape our thinking in the way we did business with our customers. The competition we faced in the transportation industry forced us to take a good look at how we could be the best at serving and satisfying our customers and continuing to grow our market share.

We are reengineering the company structure, remodelling a number of our internal services, and reestablishing our stronghold as a serious contender, all in an effort to meet the demands of our customers.

- The reorganization of our Marketing division has resulted in a convergence of all our activities towards a customer-driven focus. Our Customer Service Centre (CSC) in Winnipeg will provide a one-stop shopping facility making it easier for our customers to do business with us.

- The implementation of our new \$100 million Service Reliability Strategy Information system has begun on the BC North District and is progressing eastward.
- CN's Information Systems division has also been instrumental in CN's attainment of the ISS certification. CN is the first and only Canadian railway deemed worthy of this high esteem.
- We've placed orders for the purchase of new and remanufactured locomotives. At a time when so many North American railways are finding themselves short of motive power, we've taken action to make sure we can haul our customers freight.
- We've been watching the ongoing construction of the St. Clair Tunnel and the grand opening will be one of many exciting events we will witness in the first part of 1995.
- We've expanded one of our largest intermodal terminals in Brampton, Ontario and we've begun a joint venture operation of the Auburn Intermodal Terminal in Maine.
- CN's ratio of accidents per million train miles continues to remain consistently below industry average and CN rates in the top three Class I railroads in North America for safety records.
- The reduction of management levels has considerably improved internal communications and the decision-making process.
- We've held face-to-face meetings with front line supervisors systemwide to open the door to useful suggestions of how to better communicate between ourselves.
- The President's Awards for Excellence were introduced in 1994, a program which appears to be very successful if we base ourselves on the large number of nominations/entries received. We are learning to give recognition where it is deserved - to our employees, our colleagues and our peers, for a job well done.

We can take pride in the growth of our company and show enthusiasm for our achievements. We have already begun to see that our future vision for CN is attainable and together we have the strength and determination to help CN become the most efficient and economical rail system in Canada.

And as 1994, the International Year of the Family draws to a close, I say again, thank you to the entire CN family, and my best wishes to you and to your families, for a happy holiday season.



Dialogue avec le Président

Une année qui se termine en beauté

L'année touche à sa fin, et en constatant le chemin que nous avons parcouru, je veux vous dire merci. Merci pour avoir cru qu'ensemble nous pourrions commencer à redresser notre entreprise.

Je vous félicite pour l'attitude positive que vous avez adoptée, pour l'imagination que vous apportez à votre travail et pour les efforts énormes que vous déployez dans cette œuvre d'équipe.

Nous avons entrepris le plus ambitieux programme de changement et de renouvellement de l'histoire des chemins de fer canadiens. Notre but ultime : faire en sorte que le CN atteigne la stabilité financière et une rentabilité durable.

Nos efforts sont couronnés de succès comme le confirment nos résultats financiers du troisième trimestre : un bénéfice de 186 M \$ pour les neuf premiers mois et un bénéfice net de 86 M \$ pour le troisième trimestre. Il y a tout lieu de croire que cette tendance se maintiendra et que nous enregistrons un bénéfice impressionnant cette année.

En 1994, nos tonnes-milles commerciales ont atteint de nouveaux sommets à la fin du troisième trimestre, soit 11 % de plus qu'à la même période en 1993. Quant à la productivité, exprimée en charges par tonne-mille brute, elle est en hausse de plus de 7 %, soit l'équivalent d'une réduction de coûts de 70 M \$.

Au CN, il fallait que nous repensions nos pratiques commerciales. La concurrence qui règne dans le secteur des transports nous a forcés à rechercher des moyens de devenir les meilleurs en matière de service à la clientèle. La satisfaction de nos clients est primordiale ; elle seule nous permettra d'accroître notre part de marché.

Et c'est afin de mieux répondre aux exigences de notre clientèle que nous revoyons de fond en comble la structure de notre entreprise, que nous remodelons nos services internes et que nous nous affirmons, jour après jour, comme un transporteur de choix et un concurrent de taille.

- Avec la restructuration du Marketing, toutes nos activités convergent maintenant vers un seul but : satisfaire notre clientèle. Notre Centre de services-clients (CSC) de Winnipeg offrira à nos clients un guichet unique pour leur faciliter les échanges avec nous.
- La mise en œuvre de l'Objectif fiabilité, au coût de 100 M \$, a débuté dans le district du Nord de la Colombie-Britannique et fait son chemin vers l'Est.

• Le CN a réussi à obtenir la certification ISS, en bonne partie grâce aux Systèmes d'information. Le CN est le premier et le seul chemin de fer canadien, qui en a été jugé digne.

• De nouvelles locomotives ont été commandées, d'autres sont remises à neuf. A un moment où plusieurs chemins de fer nord-américains se trouvent à court de matériel de traction, nous avons pris des mesures pour être certains de pouvoir transporter les marchandises de nos clients.

• Nous suivons de près les travaux de construction du tunnel sous la rivière St. Clair. Son inauguration constituera l'un des points marquants de la première moitié de 1995.

• Nous avons agrandi notre terminal intermodal de Brampton en Ontario, et nous nous sommes engagés dans une coentreprise pour l'exploitation du terminal intermodal d'Auburn dans le Maine.

• Le ratio d'accidents par million de milles-trains continue de demeurer bien en-deçà de la moyenne de l'industrie et le CN se classe parmi les trois premiers chemins de fer de classe I en Amérique du Nord pour ce qui est de la sécurité.

• La réduction du nombre de niveaux hiérarchiques a grandement amélioré le processus de prise de décisions et de communication à l'interne.

• Nous avons rencontré des superviseurs de premier niveau dans tout le réseau pour recueillir des suggestions utiles en vue de mieux communiquer entre nous.

• Les Prix d'excellence du Président ont été lancés en 1994. Ce programme semble remporter un très grand succès si on en juge d'après le nombre de mises en nomination reçues. Nous apprenons à manifester notre reconnaissance à ceux et celles — membres de notre personnel et collègues — qui font du bon travail.

Nous pouvons être fiers de la croissance de notre compagnie et de ses réalisations. Nous commençons à voir que notre vision de l'avenir du CN est réalisable et qu'ensemble nous avons la force et la détermination pour aider la Compagnie à devenir le réseau ferroviaire le plus efficace du Canada.

Alors que l'Année internationale de la famille s'achève, j'en profite pour vous remercier tous et toutes une fois encore et vous offrir, de même qu'à vos familles, mes meilleurs vœux à l'occasion de la période des Fêtes.



*Jean-Louis Bousquet,
Ingénieur Recherche, CANAC,
manipule la Lococommande.*

Le train jouet de votre enfance serait-il soudain devenu réalité? Le boîtier de la Lococommande® du CN, à peine plus gros que celui que vous manipulez tout petit, peut aujourd'hui déplacer des mastodontes de 1 800 chevaux-vapeur. Grâce à un microprocesseur embarqué dans la cabine de la locomotive, la Lococommande permet à un opérateur, situé au sol, de télécommander une

locomotive de manœuvre sans mécanicien.

Le système Lococommande est utilisé au triage à butte de Symington, à Winnipeg, et les tests vont bon train dans le triage MacMillan, à Toronto. Il devrait donc être installé au triage Taschereau, à Montréal, en 1996.

Lors d'une récente démonstration de la version en palier à Taschereau, le correspon-

dant d'Au FIL DU RAIL l'a essayé en faisant faire un petit parcours à la locomotive de manœuvre 7208, sous l'oeil attentif de Rémi Lefebvre, contremaître de triage à Taschereau ; de Ron Eisenman, directeur de projet Transport, Ouest canadien, à Edmonton ; et de Cliff Johnstone, directeur Projets d'automatisation des triages — Transport, à Montréal.

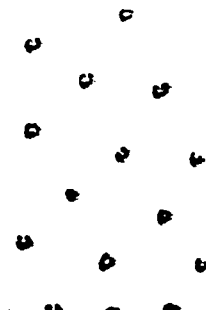
Cet exercice nous permet de constater tous les efforts consacrés par la division Technologies ferroviaires de

CANAC, les développeurs de ce système unique de télécommande, pour simplifier la tâche aux opérateurs et opératrices. Selon certains, le système Lococommande constitue le plus important développement de l'industrie ferroviaire depuis l'avènement du diesel.

SUITE À LA PAGE 3

Un énorme potentiel de ventes

Selon Gordon Patterson, directeur général — Expansion commerciale, Division Technologies ferroviaires de CANAC Inter-





Du bout des doigts...

SUITE DE LA PAGE 1

Ce qui distingue ce système, c'est sa polyvalence. Bien qu'il existe des dispositifs de télécommande depuis environ 25 ans, ces derniers sont essentiellement des systèmes de réglage de vitesse et de freinage. Seul le système Lococommande du CN utilise un ordinateur embarqué qui règle automatiquement les vitesses et le freinage en fonction de la sélection effectuée depuis le pupitre de conduite de l'opérateur au sol.

Après quelques minutes de formation, le correspondant d'AUFIL DU RAIL s'est accroché le boîtier Lococommande à la taille.

Quelques petites commandes ont suffi, sous la supervision de MM. Lefebvre et Eisenman, pour que le train s'ébranle, avance, recule, accélère, ralentisse, actionne son sifflet, puis sa cloche, et enfin s'immobilise. Ces moments m'ont rappelé le petit train de mon enfance.

La Lococommande possède une fonction qui suspend ou invalide les commandes dangereuses exécutées par l'utilisateur, un système audio qui prévient automatiquement l'utilisateur en cas de problèmes ou de dangers, de même que d'autres caractéristiques. Le système est axé autant sur la sécurité que sur la polyvalence. Un seul faux mouvement et le système de sécurité prend la relève.

Lorsque le pupitre de conduite est incliné au-delà de 45 degrés, une sonnerie retentit. Un dispositif de veille automatique, semblable à celui que l'on trouve sur les locomotives, déclenche une autre alarme si aucune commande ne lui parvient pendant un délai de 50 secondes.

Une fonction de transfert permet à deux utilisateurs au sol de se passer les commandes (un seul à la fois pilotant la locomotive). On conserve ainsi la maîtrise du déplacement.

ment en tout temps, quel que soit le sens de ce dernier. Et même si un conducteur utilise toutes les fonctions du pupitre, l'autre peut déclencher en tout temps les dispositifs de sécurité prévus.

Bien que ce soit le pupitre de conduite lui-même qui ait le plus suscité l'intérêt lors des essais, une démonstration de précision de l'attelage a aussi énormément intéressé les gens. Après sélection d'une vitesse de 1 mille à l'heure au pupitre Lococommande, deux

Lococommande, déclare M. Bozyk. Elle nous confère une plus grande responsabilité. Grâce à elle, nous pouvons contrôler des locomotives du bout des doigts, en tout temps. Le travail est intéressant, de même que la technologie qui le permet. Nous suivons une formation pour comprendre le système et son fonctionnement. C'est là une condition essentielle à la sécurité de l'exploitation dans notre milieu de travail. »

wagons marchandises ont été attelés à peu près sans bruit. Voilà une façon de faire qui diminue les avaries, augmente le nombre de wagons traités par jour et facilite le travail du personnel du CN.

Nota : Lococommande® est une marque déposée du CN.

Collaboration spéciale
Peter McCarthy



*Testing the unit.
Jean-Louis Bousquet
Research engineer,
Railroad Technologies
Division, CANAC International.*

CN's Beltpack® locomotive remote-control unit is only a little bigger than the average toy train engine. However, that 6.5-lb. box unlocks 1800 h.p. of yard-engine pulling (or pushing) power. The system lets ground-based yard employees operate a driverless switching locomotive through radio contact with a microprocessor computer in the engine cab.

The Beltpack system has been in place at Winnipeg's Symington humpyard since 1990, and testing is in progress at Toronto's MacMillan Yard. Plans call for the system to be installed at Montreal's Taschereau Yard in 1996.

At a recent media demonstration of the flat-yard version at Taschereau, KEEPING TRACK's correspondent took switching engine

7208 for a short test drive, using the remote-control unit under the watchful eyes of Rémi Lefebvre, yard foreman, Taschereau Yard, Montreal; Ron Eisenman, project manager, Transportation Services, Western Canada, Edmonton; and Cliff Johnstone, manager, Yard Improvement Projects, Transportation, Montreal.

The quick run showed that CANAC's Railroad Technologies Division, developers of the unique remote control system, put a lot of

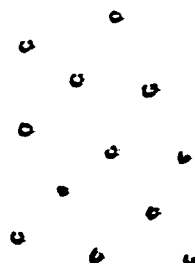
work into simplifying the system for operators. According to Johnstone, Beltpack has been described as the most significant rail industry development since the diesel engine.

What's particularly significant is its versatility. While remote-control units have been around for the past 25 years, they are typically throttle-and-brake systems. Only CN's Beltpack

Considerable sales potential

According to Gordon Patterson, general manager, Business Development, Railroad Technologies Division, CANAC

CONTINUED ON PAGE 3





locomotives at all times. The work is interesting, and so is the technology behind it. We go through a training program to understand the system and how it works. That's essential for safe operation in our work environment."

Locomotive control box

CONTINUED FROM PAGE 1

incorporates an on-board computer which automatically adjusts throttle and brake settings based on the ground operator's control-box speed selection.

After a quick briefing, KEEPING TRACK's reporter strapped on the harness and control unit. With the flick of a few switches — all under Lefebvre's and Eisenman's

guidance — the train began to move. Backward, forward. Speed up, slow down. Sound the horn. Ring the bell. Stop. Engine 7208 went through the paces much the same way this writer's model train did 25 years ago.

With its unsafe-command override, synthesized audio status updates and other features, Beltpack is designed for safety as well

as versatility. One wrong move and security systems take over. When the control unit was tilted beyond 45 degrees, a buzzer sounded. An alertness detector, much like the conventional locomotive version, set off another alarm when no command was issued in a 50-second period.

The Beltpack "pitch-and-catch" enables each of two ground employees to operate a control unit, but only one at a time. That permits constant leading-end control of the movement. Either operator can issue safety commands at any time.

While the control box itself commanded the most attention at the test-run, a precision coupling demonstration came a very close second. With the Beltpack speed set at 1 mph, two freight cars were coupled with minimal impact. That translates to less damage to customers' goods, a greater number of cars processed in a given day, and ease of operation for CN employees.

Note: Beltpack is a registered trademark of CN.

*Special to KEEPING TRACK
Peter McCarthy*

APPENDIX VIII

Copies of *Eye on Safety* / *Prévenir* Articles

Emotional video shows how to stay alive on the job

"I showed it to a group of employees, and at the end there was silence, absolute silence. Nobody said anything. Everyone was thinking . . ."

These comments were made by Serge Fournier, system supervisor, Track Evaluation, Operations, after viewing the video *Funeral for a Friend*. Mr. Fournier has 23 years of service with CN.

Funeral for a Friend tells the story of five employees accidentally killed by trains. The accidents all occurred in the winter but under different circumstances while the employees were working on the track. Absorbed by their work, none of them saw or heard the train coming. In addition to these deaths, many others have suffered disabling injuries.

The accidents are recreated in the video exactly and as dramatically as they occurred. Colleagues who witnessed the accidents also explain what happened, certifying the authenticity of the recreations. Their emotion is genuine; they witnessed what they hope never to see again.

They are convinced but will they succeed in convincing others? That is the hope of the producers: Operations Training, Engineering, and Safety and Loss Control. The video is one of many tools currently being used to train employees in the necessity and ways of protecting themselves when working on the tracks.

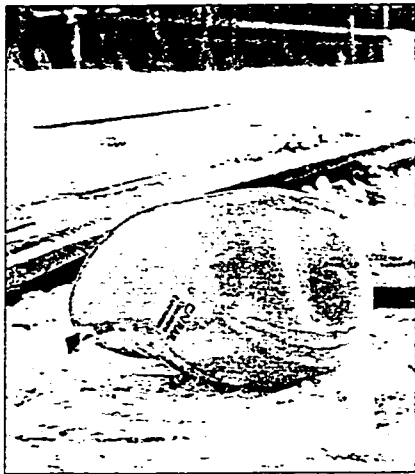
The video reaches a dramatic climax with the words of one of the widows: "When you came to tell me that my husband had been killed and hit by a train, I said, you know you can come here and tell me there's been an accident with a machine. He's been run over by a bulldozer. But my husband works on a railroad track, he knows trains. You do not get hit by a train, you know. That's the last thing you think of because he knows he has to protect himself."

Later in the video she goes on to say: "It's devastating. Your life is shattered. Your family and yourself, everything comes to an end. I mean at 40 years old you don't expect your spouse not to come home. You've still got a family, you got a household. All of these things are all on your shoulders. That partner isn't there for you anymore."

This video for track personnel is charged with emotion from start to finish. There is also a lot of respect shown for these railroaders who work jobs where safety comes before all other considerations. The video discusses death, but it also shows employees how to stay alive when working on the tracks.

Funeral for a Friend is about five particular employees, but could have been about any of the 75 employees killed on the job at CN since 1980. The last name to be added to the list of tragedies is 46-year-old Steve Walter Whitehead, maintainer, Signals and Communications, in Scarborough, Ontario, who was killed in an accident on January 15, 1993. Surviving Mr. Whitehead are his wife and three children. He had 26 years of service with CN.

The video is dedicated to the memory of these employees, and reminds us all that life is precious and worth protecting.



"When you came to tell me that my husband had been killed and hit by a train, I said, ...you do not get hit by a train, you know. That's the last thing you think of because he knows he has to protect himself."

La communication par l'émotion

«Quand je l'ai fait voir à un groupe d'employés, à la fin de la projection, on n'entendait rien. Silence. Personne ne parlait. On pensait...»

Ces commentaires proviennent de Serge Fournier, superviseur Évaluation de l'état des voies Exploitation ingénierie. M. Fournier, qui possède 23 années de service au CN, a raconté l'anecdote après avoir visionné le vidéo *Funérailles d'un ami* (*Funeral for a Friend* en anglais).

Funérailles d'un ami reconstitue les faits entourant le décès accidentel de cinq membres du personnel happés en diverses circonstances par un train en plein hiver alors qu'ils travaillaient sur la voie ferrée. Concentrés sur les tâches à accomplir, ils n'ont jamais vu ou entendu le train venir... ou du moins pas à temps. Si eux sont décédés, d'autres ont pu s'en sortir mais blessés à jamais.

La reconstitution des faits est efficace. La dramatique saisissante. D'autant plus que les témoignages vibrants de collègues de travail qui se trouvaient sur les lieux lors des accidents, valident en quelque sorte le récit. Empreints de sensibilité et d'émotion, ils marquent le vidéo du sceau de la crédibilité. Ils ont vu ce qu'ils ne veulent plus jamais revoir.

Eux sont aujourd'hui convaincus. Réussiront-ils à convaincre les autres ? C'est le pari de ce vidéo conçu par les fonctions Formation exploitation, Ingénierie (réseau), et Sécurité et contrôle des pertes. Il s'insère dans le cadre d'un vaste programme de formation sur les méthodes de protection de la voie actuellement en cours.

L'intensité dramatique atteint son sommet avec le témoignage de la conjointe de l'une des victimes.

«Lorsqu'on est venu m'annoncer que mon mari avait été tué par un train, je ne l'ai pas cru. Il aurait pu être frappé par un bulldozer ou une autre machine, mais pas par un train. Mon mari était un cheminot. Il connaissait les trains.»

Et pourtant...

Plus tard, dans le vidéo, elle poursuit : «Tout s'écroule autour de vous. Vous ne vous attendez pas à perdre votre mari à 40 ans... Vous avez encore la charge d'une famille, d'une maison. Tout cela repose sur vos épaules ; votre compagnon n'est plus là pour vous aider...»

Beaucoup d'émotions tout au long du vidéo produit pour le personnel oeuvrant sur la voie. Beaucoup de respect également pour ces travailleurs et travailleuses du rail qui exercent des métiers où la sécurité doit prévaloir. On y raconte la mort mais aussi on explique comment s'en éloigner quand on travaille sur une voie ferrée.

Funérailles d'un ami ou de celles des 75 personnes tuées dans l'exercice de leurs fonctions au CN depuis 1980. Un tiers d'entre elles ont été frappées par un train. Le dernier qui vient d'apparaître sur cette tragique liste : Steve Walter Whitehead, préposé à l'entretien Signalisation et communication à Scarborough (Ont.), est décédé accidentellement le 15 janvier 1993. Âgé de 46 ans, M. Whitehead laisse dans le deuil son épouse et ses trois enfants. Il comptait 26 années de service au CN.

Ce vidéo qui leur est dédié renferme cette éternelle vérité :
Si la mort est parfois bête et méchante... la vie vaut la peine d'être protégée.

Jean-Charles Neault
Coordonnateur



«Lorsqu'on est venu
m'annoncer que
mon mari avait été tué
par un train,
je ne l'ai pas cru.
Il aurait pu être frappé
par un bulldozer ou
une autre machine,
mais pas par un train.
Mon mari était
un cheminot.
Il connaissait les trains.»

Safety is good business

Cutting accidents and injuries also helps CN's bottom line

Safety is good business for CN, both because it benefits employees and because it can help improve the railway's financial performance, says Jack McBain, senior vice president, Operations. He believes that employee involvement is the key to making CN the safest railway in North America.

In an interview with Eye on Safety Mr. McBain said: "We've been extremely successful in the past few years in reducing employee disabling injuries — by 49 per cent between 1989 and 1992 — primarily because of direct employee involvement in developing and implementing their own safety programs.

"We plan to tap into that commitment to safety on the part of employees as well as increase the use of technology to continue to improve CN's excellent train accident record." At the time we went to press, CN was ranked third for safety among the Class I North American railroads in 1992.

Commenting on the financial aspect of safety, Mr. McBain said: "Train accidents cut like a double-edged sword on our bottom line. They are costly in themselves, and they also disrupt services which in turn can lead to revenue losses. When you look at the \$91.3 million that our accidents and injuries cost us in 1992, it's pretty obvious that it makes good business sense to focus on safety.

"The thrust to make CN the safest railway in North America is foremost in our minds."

Looking to the future, he said: "We know we can continue to improve our injury and train accident ratios, while at the same time, taking the cost-saving measures that are required in our operations. Safety will not be compromised."

CN and its employees pay a heavy price for accidents. Employees are familiar with the toll in fatalities and injuries, but less well known are the total dollar losses involved in accidents.

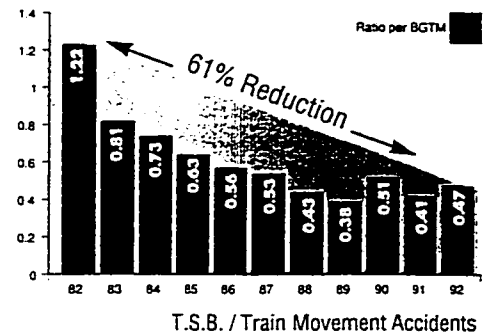
Last year the total direct costs to CN for accidents, including injuries to persons, loss of merchandise, rolling stock and clearing up wrecks were \$91.3 million. And this does not include such indirect costs as rerouting of traffic and possible loss of business due to interruptions in service.

For several years now, CN has been striving to reduce accidents by means of its safety program. Between 1989 and 1992 the ratio of employee disabling injuries per million work hours was halved from 23.2 to 11.9.

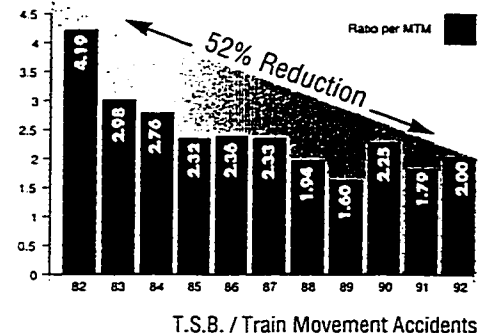
The ratio of derailments reported to the Transportation Safety Board (TSB) per million train miles declined by 52 per cent between 1982 and 1992, from 4.19 to 2.00. When measured in terms of freight tonnage, the decline in derailments was even greater, falling from 1.22 per billion gross ton miles to 0.47, or 61 per cent. At the same time, TSB-reportable train movement accidents per million train miles decreased by 45 per cent between 1982 and 1992, from 4.61 to 2.52.

Yet while the number of accidents is being reduced, their costs are increasing due to inflation and other factors.

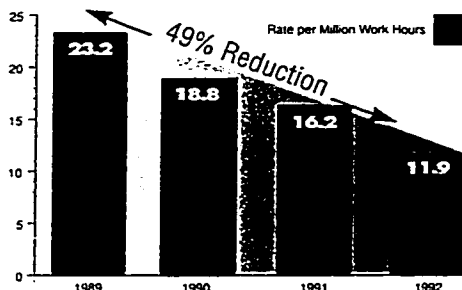
CN Derailments per Freight BGTM



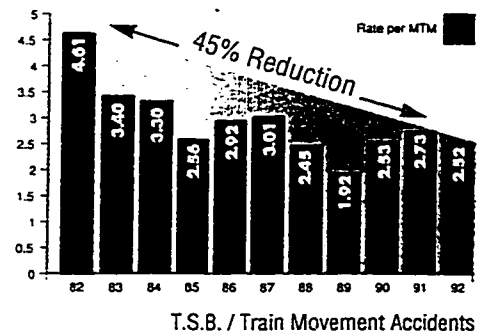
CN Derailments per Million Train Miles



System Employee Disabling Injuries



Train Movement Accidents



La sécurité est rentable

La participation du personnel: une condition *sine qua non*

Selon Jack McBain, premier vice-président Exploitation, la sécurité est rentable pour le CN, car elle profite aux employés tout en améliorant le rendement financier de l'entreprise. Jack McBain estime que la participation du personnel est essentielle si nous voulons faire du CN le chemin de fer le plus sûr en Amérique du Nord.

Interviewé par Prévenir, M. McBain a donné les précisions suivantes : « Nous avons réussi à réduire de 49 % le nombre de blessures invalidantes parmi le personnel entre 1989 et 1992. Cette performance est due en grande partie à la participation directe des membres du personnel à l'élaboration et à la mise en œuvre de leurs propres programmes de sécurité.

« Nous entendons tirer parti de cette volonté du personnel — et miser davantage sur la technologie — pour continuer d'améliorer notre fiche exceptionnelle sur le plan des accidents ferroviaires. » Au moment d'aller sous presse, le CN se classait troisième en matière de sécurité parmi tous les chemins de fer nord-américains de classe I, en 1992.

« Par ailleurs, les accidents ferroviaires ont un double impact sur les résultats financiers de l'entreprise, poursuit Jack McBain. Ils sont onéreux et peuvent également perturber le service, provoquant par le fait même une perte de recettes. Lorsqu'on pense que les accidents et blessures ont coûté au CN 91,3 millions de dollars en 1992, force est de conclure que le souci de la sécurité est rentable.

« Pour nous, il est prioritaire de faire du CN le chemin de fer le plus sûr en Amérique du Nord. »

Jack McBain s'engage aussi pour l'avenir. « Nous savons que nous pouvons encore améliorer nos ratios d'accidents avec blessures et d'accidents ferroviaires, conclut-il. Le défi consistera à intégrer cette stratégie aux mesures de compression prévues pour l'exploitation. Quoi qu'il en soit, la sécurité ne sera jamais compromise. »

Un accident coûte très cher au CN et à son personnel. On connaît bien les statistiques sur les décès et les blessures, mais on ignore dans une large mesure l'impact financier d'un accident.

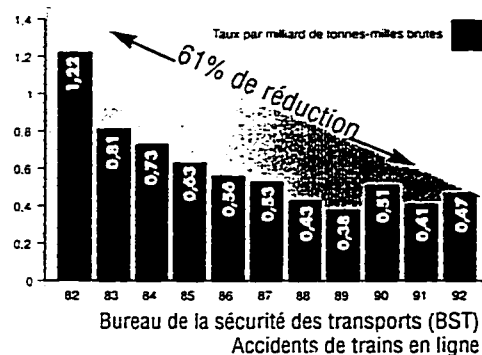
L'an dernier, le total des frais directs engagés par le CN à la suite d'accidents — y compris les blessures, la perte de marchandises, le remplacement du matériel roulant et la remise en état des lieux — s'est élevé à 91,3 millions de dollars. Précisons que ce chiffre n'englobe pas les frais indirects, liés notamment au détournement du trafic et à la perte éventuelle de clientèle attribuable aux interruptions de service.

Depuis quelques années, le CN s'emploie à réduire le nombre d'accidents par le biais de son programme de sécurité. De 1989 à 1992, le ratio des blessures invalidantes par million d'heures de travail s'est amélioré en passant de 23,2 à 11,9.

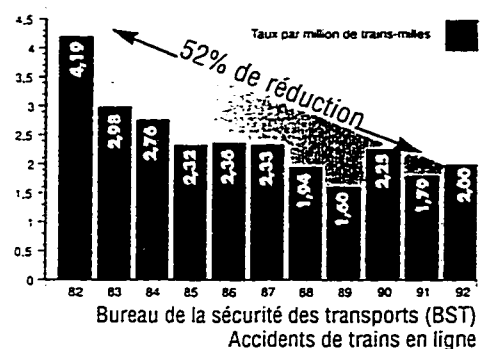
Par ailleurs, le ratio des déraillements signalés au Bureau de la sécurité des transports (BST) par million de trains-milles a dégringolé de 52 % entre 1982 et 1992, soit de 4,19 à 2,00. Mesurée en tonnes de marchandises transportées, la diminution des déraillements est encore plus frappante, soit de 1,22 à 0,47 par milliard de tonnes-milles brutes, une baisse de 61 %. Parallèlement, le taux d'accidents de circulation ferroviaire qu'il fallait déclarer au BST par million de trains-milles a régressé de 45 % de 1982 à 1992, passant de 4,61 à 2,52.

Pourtant, alors même que le nombre d'accidents diminue, leur coût augmente, notamment en raison de l'inflation.

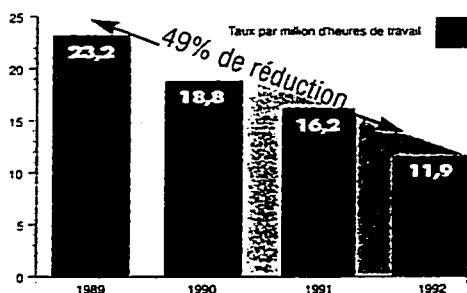
Déraillements par milliard de tonnes-milles brutes marchandises



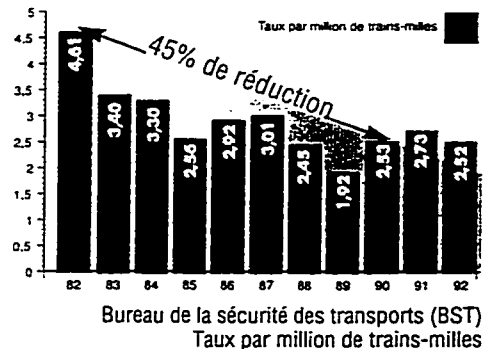
Déraillements par million de trains-milles



Blessures invalidantes parmi personnel (réseau)



Accidents de trains en ligne



Risk being late or being "the late"?

Picture it: a railway bridge that links two communities. The shortest way to get from one town to the other, on foot or by bike, is to throw caution to the wind and cross the railway bridge. The time saved: a whopping 45 minutes

Less than a month ago, on this same railway bridge, a girl of 17 was caught off guard by a freight train. She was halfway across the bridge when the train suddenly appeared out of nowhere. Trapped, her only escape was to jump into the icy cold waters of the river below.

"I went under two or three times and swallowed quite a bit of water," said the young woman, who survived the ordeal. Fortunately for her, two witnesses saw her jump and came to her rescue. A happy ending ... this time. "I'll never take that shortcut again," swears the teenager. "I've learned my lesson."

Apparently not, because the next day the young woman was pictured in the newspaper, again crossing the same bridge!

Two weeks later, five teenagers, average age 15, gathered around a table to discuss the incident. They know the young woman and all about her narrow escape from death.

They know the bridge well too. They cross it every day to go to school and to visit their friends. It's the fastest way to get there. "What else can you do, especially in winter when the weather is -20°C?" reasons Éric Lannier. For these youths, it seems any excuse is valid to risk their lives: bus tickets cost too much, they don't want to be late for an exam, and so on.

They know it's a dangerous practice, so they're careful. Before crossing, they stop, look and listen, but they cross the bridge anyway. "The risk is minor," says Émilie Gonthier, "Of course, we can't jump into the clouds and wait there while a train goes by, but we've thought of plenty of other ways to beat the train." One of their contingency plans is to sit it out on one of the bridge's three piers while the train passes. "There's enough space to squat and even handles to hold onto," adds Marie-Claude Bernard.

They come up with all sorts of imaginative solutions, including a unanimous proposal to install a pedestrian walkway on every bridge. (There are 30,000 railway bridges in Canada which would add up to a hefty bill for the authorities concerned!)

Would a less costly approach, such as a safety awareness campaign, deter them from using the bridge? The answer is an adamant "NO". Fines? Trespassers already face a \$400 fine for crossing the bridge. This doesn't seem to faze them either. What about the near miss just a few weeks ago, does that make them stop and think? "I know the girl, and it hasn't stopped me from taking the shortcut," says Éric. End of interview.

They're young, confident, and have their whole lives ahead of them, until that terrible day when a train comes along and cuts them down in their prime. Someone should tell them to look out for themselves, after all, their lives are worth a lot more than \$400.

Jean-Charles Neault

P.S. If you have any ideas or suggestions on how we can raise awareness among young people, let us know. Their lives are worth saving.



Éric Lannier, Marie-Josée Gauthier, Yann Scholer (rear), Marie-Claude Bernard and Émilie Gonthier (front) have their entire lives before them, unless...

Risquer d'être en retard ou de ne plus «être»

Le problème : un pont ferroviaire relie le coeur de deux villes. Le trajet le plus court, si l'on voyage en vélo ou en souliers, c'est d'emprunter le pont en souhaitant que le train ne vienne pas gêner les piétons. Le résultat : un gain précieux de 45 minutes.

Il y a moins d'un mois, sur ce même pont, une adolescente de 17 ans se fait surprendre par un train de marchandises. Au beau milieu du pont, il ne lui reste qu'une solution : sauter dans les eaux agitées et froides de la rivière. «... je me suis enfoncée deux ou trois fois sous l'eau et bu plusieurs tasses...», raconte-t-elle.

Heureusement pour elle, deux témoins se portent à son secours... Happy ending. «J'ai eu ma leçon, je ne remonterai plus jamais sur ce pont», de promettre la jeune fille.

Juré craché ? Dans un quotidien le lendemain, on signale le fait divers accompagné d'une photo. L'adolescente est photographiée en plein centre de la voie... sur ce même pont !

...

Quinze jours plus tard, cinq jeunes âgés de 15 ans en moyenne se retrouvent autour d'une table pour discuter de l'incident. Ils connaissent et l'adolescente et l'aventure dont elle avait été victime.

Le pont en question, ils l'empruntent volontiers pour aller à l'école, pour rendre visite aux amis. Toujours pour gagner du temps... «En hiver, à -20° Celsius, que fais-tu ?», questionne Éric Lannier. Pour eux, tous les arguments justifient l'emprunt du passage interdit : du prix élevé des billets d'autobus à l'excuse «pour éviter d'être en retard à un examen».

Oh attention ! Ils avouent être conscients du danger : ils regardent, écoutent, mais... traversent quand même. «Le danger est trop minime. On ne va pas s'attacher une corde aux nuages pour s'enlever de la voie quand le train va passer, dit Émilie Gonthier. Mais on a réfléchi à plein de trucs.» Ils ont prévu d'aller s'installer sur l'un des trois piliers du pont si un train venait à surgir. «Il y a de la place pour s'asseoir à la manière indienne et même des poignées sur les rebords pour s'y tenir solidement», ajoute Marie-Claude Bernard.

Pour trouver des solutions, leur imagination déborde et, à l'unanimité, ils proposent, entre autres, un passage piétonnier... pour chacun des ponts (on en dénombre approximativement 30 000 au Canada : une facture bien salée en perspective pour les autorités concernées).

À un moindre coût, est-ce qu'une campagne de sensibilisation les inciterait à éviter le pont ? Non, disent-ils. Des amendes ? C'est déjà 400 \$ si une personne se fait prendre sur le pont. Aucun effet. Et l'incident de l'autre jour ? «La fille, je la connaissais et je traverse encore le pont», tranche Éric. Fin de l'entrevue.

Ils sont beaux, ils sont jeunes. Ils ont toute la vie devant eux à moins qu'un accident ne vienne couper la corde qui les relie aux nuages... Quelqu'un devrait leur dire de penser un peu à leur sécurité. Ils valent beaucoup plus que 400 \$.

Jean-Charles Neault

P.-S. Avez-vous des suggestions pour sensibiliser davantage les jeunes ? Nous serions heureux de les recevoir.



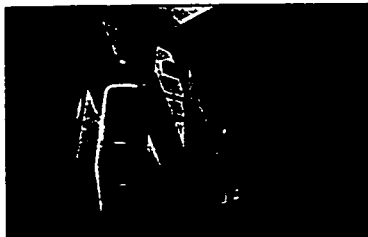
Éric Lannier, Marie-Josée Gauthier, Yann Scholer (à l'arrière), Marie-Claude Bernard et Émilie Gonthier (à l'avant)... ont toute la vie devant eux à moins que...

Gimli simulators

Locomotive engineers get real taste for safe operations

CN's Operations training centre in Gimli, Man., opened in June 1972, has played a leading role improving the railway's safety record.

At Gimli the latest technology is used to train the locomotive engineers who operate CN trains from coast to coast. Moving a 110-car train at high speeds is a complex and demanding task, and such factors as safety, efficiency and fuel conservation depend largely on the skill and training of the person at the controls.



ated by the simulator, so that there is an objective assessment of each student's abilities.

After graduating from Gimli, students spend up to another six months' working as trainees on their home territories, learning the characteristics of each subdivision by working with experienced locomotive engineers. When they are judged to be fully competent they must pass an evaluation by the Engine Service Officer

before they can take a train out on their own.

Hands-on training, no service disruption

To provide hands-on training without disrupting traffic or damaging equipment, the Gimli centre is equipped with three simulators that provide all the sights, sounds, motion and instrument feedback of a real locomotive.

Each year, approximately 300 candidates take the student locomotive engineer course. To qualify, they are already working as conductors or yard forepersons. They are given lectures on the technical aspects of locomotive operations, and then begin to specialize on learning each aspect of train operation. The residential course takes five weeks, and during that time each student spends at least 30 hours in a simulator and attends classroom sessions. At the end, there is a test which is automatically evalu-

Refresher courses

The Gimli centre is also running refresher courses for approximately 100 locomotive engineers this year to update their skills. Currently, the centre, with the help of locomotive engineers and engine service officers, is working at reducing CN's fuel costs through modified train handling procedures. This is one step towards helping CN remain competitive.

Says Bill Sears, manager of the Gimli centre: "Our mission is to ensure that locomotive engineers receive the best training they need to operate trains safely and efficiently. It gets away from having to learn by the seat of your pants."

One measure of the success of the centre is that it has helped reduce rail accidents related to human factors by an estimated 61 per cent since it opened.

Safety: a strategic value at CN

Facilitating development of people and process skills among executives, management and supervisors is the major objective of the system training group in Human Resources.

The focus on safety is reflected here, too, not in the "hands on" manner seen in Operations Training courses, but as a strategic value at CN.

"CN managers from all levels, functions and locations are our direct customers," says Sonia Serfaty, director - system train-

ing, Human Resources. "They've chosen safety as an essential component of CN's vision, values and strategy, and we reflect that priority in every one of the management training programs we offer."

Human Resources provides approximately 13,200 days of training per year to some 2,600 executives, managers and supervisors. "The importance of safety to business success is emphasized through word and action whenever we gather people together to learn," stresses Ms. Serfaty.

Les mécaniciens de locomotive sur... la voie de la sécurité !

Le centre de formation de l'exploitation de Gimli, au Manitoba, inauguré en juin 1972, a grandement contribué à améliorer la fiche de sécurité du CN.

À Gimli, on fait appel à des techniques de pointe pour assurer la formation des mécaniciens et des mécaniciennes de locomotive qui conduisent les trains du CN d'un océan à l'autre. La conduite d'un train de 110 wagons à vitesse élevée est une tâche complexe et exigeante : la sécurité, l'efficacité et l'économie de carburant reposent en grande partie sur les aptitudes et la formation de la personne aux commandes.

Pour dispenser au personnel une formation pratique sans perturber la circulation ou endommager le matériel, le centre de Gimli est équipé de trois simulateurs qui reproduisent la visibilité, le mouvement et les indicateurs d'une vraie locomotive.

Chaque année, environ 300 stagiaires participent au cours de mécanicien de locomotive. Pour être admissibles, ils doivent déjà travailler à titre de chef de train ou de superviseur dans un triage. Les stagiaires assistent d'abord à des exposés théoriques sur les aspects techniques du fonctionnement des locomotives et commencent ensuite à étudier la conduite des trains. Le cours sur place dure cinq semaines, pendant lesquelles chaque personne passe au moins 30 heures dans un simulateur, en plus des séances en classe. À la fin du cours, les stagiaires passent un examen en simulateur, ce

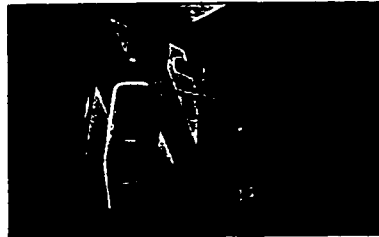
qui assure une évaluation objective de leurs aptitudes.

Après Gimli, les stagiaires travaillent six mois dans leur territoire en compagnie de mécaniciens de locomotive chevronnés dans le but de se familiariser avec les caractéristiques de chaque subdivision. Lorsqu'ils sont jugés aptes à prendre le service, ils doivent passer l'examen du coordonnateur de trains avant de pouvoir enfin assumer seuls la conduite d'un train.

Cette année, le centre de formation de Gimli dispensera des cours de perfectionnement à une centaine de mécaniciens de locomotive dans le but d'actualiser leurs connaissances. À l'heure actuelle, le centre s'emploie à réduire les coûts de carburant du CN en mettant en oeuvre de nouvelles méthodes de conduite avec l'aide des mécaniciens de locomotive et des coordonnateurs de trains. Cette mesure vise à aider le CN à rester compétitif.

«Notre mission consiste à dispenser aux mécaniciens de locomotive la formation nécessaire à la conduite sûre et efficace des trains. L'apprentissage est axé davantage sur la pratique», dit Bill Sears, directeur du centre de Gimli.

Signe de la réussite du centre : on estime qu'il a contribué, depuis son inauguration, à réduire de 61 pour cent le nombre d'accidents ferroviaires imputables à une erreur humaine.



La sécurité est une valeur stratégique

La section Formation des Ressources humaines a pour rôle de favoriser le perfectionnement des superviseurs, cadres et membres de la haute direction et de les aider à acquérir une bonne maîtrise des processus.

Là aussi, la sécurité est un aspect fort important de la formation, non pas en termes d'applications concrètes comme dans le cas des cours destinés au personnel d'exploitation, mais bien comme une valeur stratégique pour le CN.

«Nous recrutons notre clientèle parmi les gestionnaires du CN à tous les échelons, et dans toutes les unités administratives ou de travail,

souligne Sonia Serfaty, directrice administrative Formation réseau. La sécurité est un élément fondamental de la vision, des valeurs et de la stratégie du CN, et tous les programmes de formation que nous offrons tiennent compte de cette priorité.»

Les Ressources humaines dispensent environ 13 600 jours de formation par année à quelque 2 600 cadres supérieurs, cadres et superviseurs. «Au sein de tous les groupes, nous faisons valoir, tant par les mots que par les gestes, l'importance de la sécurité dans la réussite commerciale du CN», affirme Sonia Serfaty.

Entire Operations Training curriculum stresses safety

If CN's Operations Training can be compared with a technical college with campuses across the system, then Bruce Paterson can be regarded as being in charge of the curriculum. As Director, Training Services, he is responsible for the development and delivery of technical training programs across the system.

His task is to combine corporate goals and objectives with the specific needs of the managers, supervisors and employees working in a wide range of activities from coast to coast.

Says Mr. Paterson: "We work closely with the people in the field to ensure that the courses are related to their requirements, because they are responsible for ensuring that the work is done safely and according to the appropriate standards."

A great deal of care goes into preparing course material that is both technically accurate and instructionally effective for those attending the courses. This includes ensuring that the level of language used is that likely to be most familiar to the students. Says Mr. Paterson: "We have adopted a standard format for the instructor's material so that the message is delivered consis-

tently across the country." And on the front page of each book is CN North America's mission and vision, including the commitment to be first in safety.

All material is prepared in both official languages, and this means careful checking to ensure that technical terms are properly translated into English or French from original documents.

Courses pretested

Says Mr. Paterson: "When we prepare a new course we test it out on a sample group of students to ensure it is instructionally sound and that objectives have been met before it is sent out to the field."

Developing courses is an ongoing task, because material has to be updated on a continuing basis to take account of new techniques and technology. Liberal use is made of drawings to illustrate written material, and videos have provided a useful new tool for showing employees the right and safest way to perform their tasks.

In track maintenance for example, trainees are shown not only how to do the task safely, but also how to choose the right tool and ensure that it is safe to use before starting the task.

Videos have proved a useful tool for training employees.



Tony D'Adamo, training supervisor - Welding (fourth from left) never starts a course without a job briefing.

Job briefing

Another safety-oriented practice included in training is job briefing. All Operations Training courses start with a job briefing to ensure that every trainee knows the basic job steps, is made aware of the potential hazards, uses the right safety equipment and reviews emergency procedures. Each employee also knows his or her exact responsibilities, and confirms that the instructions are understood.



Bruce Paterson

"This is part of Operations Training's commitment to working safely and supporting the efforts of Safety and Loss Control," says Mr. Paterson.

In addition to developing its own courses, Operations Training also relies on training provided by local technical colleges and CEGEPs wherever possible. "We don't believe in reinventing the wheel," says Mr. Paterson. "If we can get the training from outside, we don't duplicate this work."

Different levels

Training covers skills at different levels, from that required by an apprentice or a newly-hired employee, to the advanced knowledge required by supervisors and mature employees seeking to qualify for more highly-skilled positions.

Says Mr. Paterson: "Courses such as welding are often attended by supervisors and managers who will be required to oversee or manage the work as well as by those who actually do the welding. If you're responsible for managing a technical task like welding, then you have to know how it is done."



photos: Marcel Sorey—CN

Cours actualisés, vidéos et briefings... enrobés de sécurité !

Si on comparait la Formation exploitation du CN à un collège technique, Bruce Paterson serait le responsable du programme d'études. En effet, en tant que directeur Services de formation, il veille à l'élaboration et à l'application des programmes de formation technique à l'échelle du réseau.

Sa tâche est de combiner les objectifs de la Compagnie aux besoins particuliers des gestionnaires, des superviseurs et des employés, dans des domaines variés, d'un océan à l'autre.

« Nous travaillons de près avec les gens sur le terrain pour préparer des cours qui répondent à leurs besoins, parce que ce sont eux qui ont la responsabilité ultime de veiller à ce que le travail soit fait en toute sécurité et dans les normes », dit M. Paterson.

L'approche est rigoureuse : on veille à ce que le matériel soit exact sur le plan technique et efficace sur le plan de l'instruction. Dans cette optique, on adopte un niveau de langue facile à comprendre pour les stagiaires. Le matériel des instructeurs a été normalisé afin que le même message soit livré partout dans le réseau. De plus, la pre-

mière page de chaque document arbore la mission et la vision de CN Amérique du Nord, dont l'engagement est d'être le premier en matière de sécurité.

Tous les cours sont offerts dans les deux langues officielles, on s'assure que les termes techniques sont bien traduits en anglais et en français, selon la langue dans laquelle le texte a été rédigé.

« Avant d'offrir un cours, nous le validons auprès d'un groupe d'étudiants afin de s'assurer que le contenu est efficace et que nous atteignons les objectifs que nous nous sommes fixés », précise M. Paterson.

Le matériel didactique est continuellement mis à jour afin de rendre compte des nouvelles techniques ainsi que de la technologie qui évolue. On se sert abondamment des graphiques afin d'illustrer les textes. De plus, les vidéos de formation constituent un outil fort utile pour montrer aux membres du personnel comment exécuter leurs tâches de façon adéquate et sûre.

À l'Entretien de la voie, par exemple, on n'apprend pas seulement comment accomplir une tâche en sécurité, mais aussi comment choisir le bon outil et vérifier qu'il n'est pas dangereux avant de s'en servir.

Le briefing pour débiter

Pour renforcer la sécurité, tous les cours de la Formation exploitation commencent par un briefing qui prépare les stagiaires au travail, on s'assure que tout le monde connaît les étapes du travail et les risques

potentiels, utilise l'équipement de protection approprié et sait quoi faire en cas d'urgence. Ce briefing sert aussi à confirmer que chaque membre du personnel connaît ses responsabilités et a compris ses instructions. Comme le souligne M. Paterson, « cela fait partie de l'engagement que la Formation exploitation a pris en matière de sécurité au travail et des efforts déployés à cet égard par le service Sécurité et contrôle des pertes ».



Bruce Paterson

L'élaboration des cours est une tâche perpétuelle puisque la matière doit être constamment actualisée afin de tenir compte des nouvelles techniques. « Quand un nouveau cours est mis au point, nous le validons par un essai-pilote pour s'assurer qu'il se comprend bien avant de le diffuser. »

Des cours à tous les niveaux

La Formation exploitation se prévaut aussi de la formation offerte par les collèges techniques et les cégeps, chaque fois que cela est possible. « Nous ne cherchons pas à réinventer la roue. Ce serait un doublement d'efforts inutile que de ne pas tirer profit des cours qui se donnent à l'extérieur », dit-il.

La formation s'adresse à tous les niveaux : des aptitudes de base que nécessitent les apprentis ou les personnes fraîchement embauchées, aux connaissances approfondies dont ont besoin les superviseurs et les personnes d'expérience pour gravir les échelons dans la Compagnie.

« Il n'est pas rare que des superviseurs ou des gestionnaires assistent à des cours de soudage, par exemple, avec ceux qui vont, à proprement parler, faire le travail. Si une personne est responsable de surveiller ou gérer des travaux d'une telle nature technique, ou le personnel qui les exécute, il est tout à fait normal qu'elle sache comment ce travail se fait », explique M. Paterson.



photos : Marcel Soucy—CN



Tony D'Adamo instructeur en soudure (quatrième à partir de la gauche) ne commence jamais un cours sans un briefing.

Extensive training fuel CN's safe operations

Every time a locomotive engineer takes a train on the main line, or a track maintainer replaces a rail, or a bridge worker carries out a task high above the ground, the ability to do the job safely and effectively is based on adequate training.

The responsibility of ensuring that this training is provided rests with Operations Training, which offers more than 300 courses in the wide range of skills and knowledge required in Transportation, Motive Power and Car Equipment, Engineering and Purchasing and Materials departments.

High enrolment

Last year attendance of Operations employees at courses totalled 9,000, and this year the number is expected to rise to 15,000 to train CN employees to deal with new technology, prepare for new positions, or refresh their existing skills. Some employees may attend more than one course in a year, and the courses can range from several hours to five consecutive weeks in the case of student locomotive engineers.

Operations Training is only one aspect of the total employee training program in which CN invests more than \$50 million annually. Other major areas of training include human resource training,

computer-related information technology, and the Canadian Railway Operating Rules. But Operations Training has the broadest impact on safety, since it includes every aspect of Operations, from defensive high-way driving to signals maintenance, and from handling dangerous goods to crane safety.

Eleven major training centres

There are 11 major training centres across the system, varying in size and range of subjects covered to meet local needs. They include the training centre at Gimli, Man., which is equipped with sophisticated locomotive simulators, the Dunvegan training centre in Edmonton, the Transcona training centre in Winnipeg, the MacMillan yard in Toronto, Place Bonaventure and Taschereau yard in Montreal, Charny, Qué., and Gordon yard in Moncton. Training is also provided in Detroit for Grand Trunk and other CN North America employees in the U.S.

Says Don Holfeld, system director, Operations Training: "We carry out a wide range of training to provide the railway with the skilled people needed to operate safely and effectively, and also to satisfy collective

agreements, legislative and mandatory requirements. We provide apprenticeship programs in accordance with collective agreements, and have recently introduced our concept of apprenticeships to the Grand Trunk

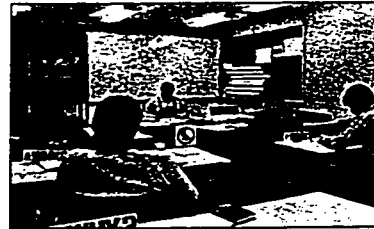


Don Holfeld

"In the current situation, as the railway is downsizing, the need for training and retraining is increasing. When employees change positions or are forced to add to their existing job duties due to functional or personnel realignment, we must ensure that they are properly trained to carry out the duties involved."

One growing trend in training is to provide more of the courses in the field and on the job rather than at centres that take employees away from their work locations. Says Mr. Holfeld: "This has advantages when the workforce is being reduced, and also provides more practical training, because it can be related to the employee's working location."

When you work on a section of track where a rail is being replaced, safety and efficiency depend on the quality of classroom and on-site training.



photos: Marcel Souty—CN

"Safety aspect of training extends from classroom to daily briefing."

—Jack McBain

Training is a key element in having a safe rail operation according to Jack McBain, senior vice-president, Operations. It requires input by both the railway and employees.

"In order to have safe practices in the workplace you must have well-trained employees. That's why CN is making a considerable investment in training.

"This emphasis on improving employees' knowledge and skills includes formal, classroom-type courses, but it extends to the

daily discussion before the work is started when employees themselves review the task before them, and ensure everyone understands the role they have to play in getting it done safely.

"To be effective in improving safety, training has to go beyond the classroom. The lessons learned and skills developed have to be applied every day in the operation of the railway. In this way can we achieve our shared objectives of eliminating accidents and injuries."

L'une ne va pas sans l'autre...

Chaque fois qu'un mécanicien de locomotive engage son train sur la voie principale, qu'une préposée à l'entretien de la voie remplace un rail ou qu'un ouvrier exécute une tâche en hauteur sur un pont, la sécurité et l'efficacité du travail accompli reposent sur la qualité de la formation.

La responsabilité de cette formation incombe au service de la Formation exploitation, qui offre plus de 300 cours visant à inculquer au personnel les aptitudes et les connaissances nécessaires aux activités du Transport, de la Traction et du matériel remorqué, de l'Ingénierie et des Achats et stocks.

L'année dernière, 9 000 membres du personnel de l'Exploitation ont participé à des cours de formation. Cette année, on prévoit que 15 000 personnes en bénéficieront pour apprendre à se servir de nouvelles techniques, se préparer à assumer de nouvelles fonctions ou revoir leurs connaissances actuelles. Certains membres du personnel, parmi un effectif d'environ 20 000 personnes, peuvent participer à plus d'un cours par année ; les cours peuvent durer plusieurs heures et même cinq semaines dans le cas des mécaniciens de locomotive stagiaires.

La Formation exploitation ne constitue qu'un des éléments du programme de formation global dans lequel le CN injecte plus de 50 millions de dollars chaque année. Les autres secteurs de formation sont : les ressources humaines, l'informatique et le

Règlement d'exploitation ferroviaire du Canada. Mais c'est la Formation exploitation qui a le plus grand impact sur la sécurité, puisqu'elle touche toutes les activités de l'Exploitation, de la conduite routière préventive à l'entretien de la signalisation, et de la manutention des marchandises dangereuses à la manoeuvre des grues.

Onze grands centres de formation

Il existe onze grands centres de formation à l'échelle du réseau, dont la taille et les programmes varient en fonction des besoins locaux. Citons entre autres le centre de formation de Gimli, au Manitoba, qui est équipé de simulateurs de locomotive modernes, celui de Dunvegan situé à Edmonton, celui de Transcona à Winnipeg, ceux du triage MacMillan à Toronto, de la Place Bonaventure et du triage Taschereau à Montréal, ainsi que les centres de Charny près de Québec et du triage Gordon à Moncton. On dispense également des cours de formation à Detroit au personnel du Grand Trunk et à d'autres employés de CN Amérique du Nord aux États-Unis.

«Nous dispensons une panoplie de cours de formation dans le but de fournir au CN le personnel qualifié dont il a besoin pour garantir une exploitation sûre et efficace, mais également pour nous conformer aux conventions collectives ainsi qu'aux exigences législatives et réglementaires. Nous offrons des programmes d'apprentissage

conformes aux dispositions des conventions collectives et, dernièrement, nous avons étendu le principe d'apprentissage au Grand Trunk», affirme Don Holfeld, directeur (réseau) Formation exploitation.

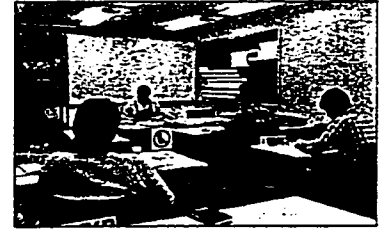
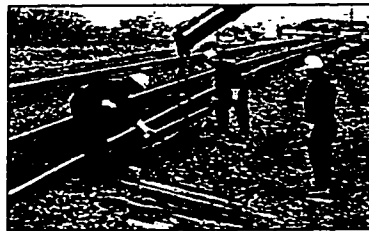


Don Holfeld

«À mesure que le chemin de fer réduit ses effectifs, les besoins en matière de formation et de recyclage augmentent. Nous devons nous assurer que les personnes qui changent de poste ou qui sont obligées d'assumer de nouvelles fonctions en raison de la restructuration des services et du personnel reçoivent la formation qui leur permettra de s'acquitter convenablement des tâches en question.»

L'une des tendances actuelles consiste à dispenser plus de cours sur le terrain et sur les lieux de travail que dans les centres. «Cette façon de faire présente des avantages dans le cas d'une réduction de personnel et donne une formation axée davantage sur la pratique, puisqu'elle est adaptée au lieu de travail», ajoute M. Holfeld.

Que l'on manoeuvre sur la voie ou que l'on remplace un rail, sécurité et efficacité reposent sur la qualité de la formation acquise en classe ou sur le terrain.



photos : Marcel Soucy—CN

«L'aspect sécurité de la formation s'étend de la salle de classe au briefing quotidien»

— Jack McBain

Selon Jack McBain, premier vice-président de l'Exploitation, la formation joue un rôle clé dans la sécurité de l'exploitation ferroviaire et appelle à la participation du chemin de fer et des cheminots.

«Pour que les méthodes de travail soient sûres, il faut que le personnel soit bien formé. C'est pourquoi le CN investit considérablement dans la formation, dit M. McBain.

«Cet effort visant à améliorer les connaissances et les méthodes comprend des cours structurés en classe, mais il

touche également les discussions quotidiennes précédant le début des travaux, où les membres du personnel eux-mêmes reviennent les tâches à exécuter et s'assurent de bien comprendre leur rôle afin d'éviter tout danger.»

«Pour améliorer efficacement la sécurité, la formation doit s'étendre au-delà de la salle de classe. Les connaissances et les techniques acquises doivent être appliquées dans l'exploitation quotidienne du chemin de fer. C'est ainsi que nous pourrions atteindre notre objectif commun d'éliminer les accidents et les blessures», ajoute-t-il.

Nakina

continued from page 9

surface and the shoreline. Immobilized by a broken pelvis and covered in oil and diesel fuel, Ricard remained on the shore until about 21:20, when he was found by Brian Albert, conductor of CN train 218.

Since portable radio equipment use was limited by the shadow created by the 25-foot-high embankment, the rescuer ran toward his own train, after covering Ricard with his coat. At about 21:45, the conductor reached Joe Mitchell, the engineer on train 218, who passed on news of the crash to train 212. The conductor of train 212, Tim Craig, then contacted CN's Toronto rail traffic control centre (RTC) by telephone from a nearby track maintenance facility. Another conductor, Bruce LaFleur, volunteered to remain at the Cavell NOMAD camp throughout that evening to enable continuing communication between the Toronto RTC and the accident site. Communication pole lines adjacent to the track had been knocked down by the derailed train.

Locomotives from train 218 took ambulance and firefighting personnel to the accident scene. Shortly after midnight, Ricard was brought by the locomotive to a level crossing for transportation to hospital by road vehicle. The injured locomotive engineer was first taken to Geraldton Community Hospital; and then to McKellar General Hospital in Thunder Bay to treat his broken pelvis.

An immediate search of the area for Stolz and Gadbois proved unsuccessful. In the days following the accident, their bodies were recovered by Ontario Provincial Police and com-

Nakina

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une fracture du pelvis et couvert d'huile et de carburant diesel, il est demeuré sur la rive jusqu'à environ 21 h 20, moment auquel il a été découvert par Brian Albert, chef du train 218 du CN.

Comme l'utilisation de la radio portative était rendue impossible par le mur que formait le remblai de 25 pieds, le secouriste a couvert Ricard de sa veste et couru jusqu'à son train. À environ 21 h 45, le chef de train a joint Joe Mitchell, le mécanicien du train 218, qui a alerté le train 212. Le chef du train 212, Tim Craig, a alors communiqué avec le Centre de contrôle de la circulation ferroviaire (CCCF) de Toronto par téléphone depuis un poste d'entretien de la voie qui se trouvait à proximité. Un autre chef de train, Bruce Lafleur, s'est porté volontaire pour demeurer au camp Cavell NOMAD tout au long de la soirée pour assurer les communications entre le CCCF de Toronto et les lieux de l'accident, étant donné que les lignes aériennes qui longeaient la voie avaient été coupées par le déraillement du train.

Des locomotives du train 218 ont transporté les ambulanciers et les pompiers sur les lieux de l'accident. Peu après minuit, Ricard a été conduit par locomotive jusqu'à un passage à niveau, d'où il a été emmené à l'hôpital par la route. Le mécanicien blessé a d'abord été transporté au Geraldton Community Hospital, puis au McKellar General Hospital de Thunder Bay.

Les recherches immédiatement entreprises pour retrouver Stolz et Gadbois ont été vaines. Dans les jours qui ont suivi

CN takes action

Year after year, CN continues to be ranked as one of North America's safest railroads; safety has always been one of the company's top priorities. Constant vigilance, employee training, and equipment and track maintenance play a significant role in safety efforts throughout the CN system.

At the same time, when an incident does occur, whether a rare catastrophe such as the Nakina accident or a smaller-scale mishap, the CN action plan includes quick corrective measures, and an evaluation of the event's causes and circumstances. Learning as much as possible from an unfortunate experience helps to prevent a recurrence.

Immediately after

Immediately following the incident, CN took action to cor-

rect the situation, restore service, and minimize environmental impact at the Nakina site. Booms and absorption materials were put in place to stem the flow of diesel fuel and lubricant oil in the water at the scene of the accident. Most of the 3,000 gallons which escaped were recovered. A new railway embankment was reconstructed away from the unstable zone.

Prevention is major part of solution

"The optimum solution to any problem goes far beyond restorative action," says Jed Drew, district manager, Northern Ontario District. "It should include preventive measures. For this reason, CN held a debriefing at Hornepayne, Ontario, in September last year, to pinpoint the causes of the Nakina crash."

Recommendations addressed

In addition to CN's thorough analysis of the situation and resulting initiatives, the company has also paid close attention to recommendations from the Chief Coroner and the Transportation Safety Board.

In response to Transportation Safety Board recommendations, and on its own initiative, CN is concentrating on the potential problems of water accumulation on the downhill side of embankments in areas with beaver populations. Training and inspection procedures also serve to increase employee awareness, and ensure safe, reliable right-of-way embankments.

Four of the Coroner's 10 recommendations have been addressed specifically by CN's Engineering department.

The Coroner called for an ongoing hazard identification system, regular inspections by track supervisors, guidelines for special inspections, and a communications system upgrade.

Regarding the call for an ongoing hazard identification system, CN has intensified efforts to find sites where there is any possibility for occurrence of a like event. Analysis of original right-of-way plans, aerial photographs and soil core samples by CN's geotechnical service (in operation for more than 30 years) helps identify sites with conditions similar to Nakina. In the event that such areas are found, CN does have an ongoing program to correct these conditions.

At the same time, the regular track and right-of-way inspections continue to be an integral part of the CN safety program. Where necessary, close attention is paid to beaver populations and their activities, and track personnel look for new beaver dams which could prove to be dangerous. If inspection and aerial surveys point to any areas

where beaver activity poses a threat, those sites will be inspected, and water would be carefully drained. Beaver dam control programs have always been in place at CN, and annual aerial surveys continue to be conducted to closely monitor beaver dam problems across the system where required.

CN has expanded previous programs to control beaver dams adjacent to track embankments, in particular, to include locations where water is ponded on the downstream side of the track. The company also intends to improve the training of track forces to increase their awareness of the hazard of potential rapid draw down. A general awareness program will be initiated to highlight the unique nature of this derailment and what can be done to prevent a recurrence.

CN's Engineering department also dealt specifically with a fourth recommendation: the continued upgrade of the communications system. In the period immediately after the incident,

one of CN's highest priorities was to implement an automatic fallback radio system to restore the communication lines which had been severed by the derailed train. CN has installed a fallback system that will bring back voice contact within 30 seconds of any failure, by backtracking communication from wherever the break occurs. The company also increased the height of a transmission tower in the area, to eliminate some radio dead spots.

Employee education

On the employee education side, the Coroner also recommended that CN train and track staff be instructed to recognize potentially hazardous conditions.

According to Don Holfeld, system director, Operations Training, "CN track personnel are trained in proper track and right-of-way inspection and to watch for beaver dams and high water.

Action

continued from page 11

This is very well laid out in the instruction packages for Track Maintainers and Track Maintenance Foremen."

On-board operating crew needs are also being addressed by training efforts for student locomotive engineers and refresher courses for seasoned engineers given at the Operations Training Centre in Gimli, Manitoba. New course goals enable participants to identify abnormal track and right-of-way conditions which they might encounter, including high-water situations caused by beaver dams. This training package is now in the final development stage.

Communications equipment recommendations considered

In the equipment area, the Coroner also recommended upgraded portable radio equipment and event recorders, as well as emergency locating beacons for lead locomotives. Each of these recommendations has been seriously considered by CN.

While CN did examine the possibility of issuing huge 10-watt radios to train crews, it was determined that a more powerful unit would not have helped in this specific situation. Any radio's effectiveness would have been limited by the 25-foot-high embankment.

CN also looked at the Coroner's recommendations to improve its event recorders. Already installed on all of CN's main-line locomotives, the units monitor and record train speed, braking and engine functions, and provide essential data about the causes of incidents.

CN outfitted its entire fleet with microprocessor-based event recorders during the late 1980s, and did look at building these to aircraft "black box" specifications at the time. However, the incremental advantages provided by crash-proof, fire- and immersion-resistant recorders would not have justified their significantly higher cost.

Instead, CN opted to equip its entire locomotive fleet with event recorders. This provides flexibility, and ensures that in most cases, at least one of the units will remain intact and save data. Each event recorder has approximately 10 more years of service left.

CN also looked closely at the Coroner's suggestion to install emergency locating beacons on lead locomotives. The finding was that outfitting trains with these emergency transmitters would not make rescue efforts any easier.

"Emergency beacons are practical, and widely used on boats and aircraft, which can wander far off course," says Joe Turvolgyi, assistant chief, Motive Power. "Locomotives, on the other

hand, travel on a fixed track, and don't wander far from the track. We already have the means to find a train in distress."

The Coroner called for a review of CN's emergency procedures. This includes identifying individual responsibilities; ensuring that all staff are properly trained in procedures and have access to written measures; and conducting emergency drills. Each of these points has always been addressed and implemented throughout CN.

"Knowledge gained, and shared, from debriefing workshops after the Nakina incident — and all others — helps us to further develop our emergency response procedures," says Dave House, superintendent, Transportation, NOD.

The Coroner also recommended that CN advise its employees of the unique circumstances surrounding the Nakina incident. Following CN's detailed internal analyses, memos were distributed to appropriate employees throughout the company. And once again, this article, as well as being a tribute to Gary Stolz, Ron Gadbois and Jerry Ricard, serves to give CN employees insight into the causes of this rare, unfortunate event, and how to avoid a recurrence.

Mesures prises par le CN

Année après année, le CN continue de se classer parmi les chemins de fer les plus sûrs d'Amérique du Nord : la sécurité a toujours figuré au nombre des priorités de la Compagnie. La vigilance, la formation du personnel et l'entretien de la voie et du matériel jouent un rôle important dans le cadre des activités de sécurité à l'échelle du réseau du CN.

Par ailleurs, lorsque survient un accident, qu'il s'agisse d'une catastrophe exceptionnelle comme l'accident de Nakina ou d'un incident de moindre envergure, le plan d'action du CN comprend des mesures de redressement rapides ainsi qu'une analyse de la cause de l'accident et des circonstances qui l'entourent. C'est en apprenant le plus possible d'une expérience malheureuse que l'on pourra empêcher qu'elle ne se reproduise.

Immédiatement après

Immédiatement après l'accident, le CN a pris les mesures nécessaires pour redresser la situation, rétablir le service et réduire les effets néfastes sur l'environnement à Nakina. Des barrages flottants et des matériaux absorbants ont été mis en place pour enrayer la dispersion du carburant et de l'huile dans l'eau. Ainsi, on a récupéré la majeure partie des 3 000 gallons qui s'étaient échappés. On a construit un nouveau remblai, loin de la zone instable.

La prévention

« Quel que ce soit le problème, la solution idéale se trouve bien au-delà des mesures de redressement », dit Jed Drew, directeur (réseau) du district du Nord de l'Ontario. « Elle doit comprendre des mesures de prévention. C'est pourquoi le CN a tenu une séance d'information à Hornepayne en Ontario, en septembre dernier, pour

expliquer les causes de l'accident de Nakina. »

Recommandations

Outre l'analyse exhaustive et les mesures mises en œuvre, le CN a examiné soigneusement les recommandations du coroner en chef et du Bureau de la sécurité des transports.

Il a décidé de concentrer ses efforts sur les risques que présente l'accumulation d'eau au pied des remblais dans les régions habitées par des castors. La formation et les inspections lui permettent également de sensibiliser le personnel et de garantir la fiabilité des remblais.

Le service de l'Ingénierie du CN a mis en œuvre quatre des dix recommandations du coroner, soit la mise en place d'un système permanent d'identification des dangers, la tenue d'inspections périodiques par les

superviseurs de la voie, l'établissement de directives dans le cas des inspections spéciales et l'amélioration du système de communications.

En ce qui concerne l'identification permanente des dangers, le CN a intensifié ses efforts afin de découvrir les endroits pouvant présenter les mêmes risques que celui de Nakina. L'analyse des plans originaux de l'emprise ferroviaire, de photographies aériennes et d'échantillons de sol par le service de géotechnique du CN (qui existe depuis plus de 30 ans) permet de repérer les endroits qui présentent les mêmes caractéristiques que Nakina. Si l'on découvre des lieux de cette nature, le CN mettra immédiatement en oeuvre son programme de redressement.

Par ailleurs, l'inspection périodique de la voie et de l'emprise ferroviaire continue d'être une partie intégrante du programme de sécurité du CN. Lorsque c'est nécessaire, on accorde une attention particulière aux populations de castors, et le personnel de la voie recherche de nouveaux barrages qui présentent des risques. Si la pho-

tographie aérienne permet de découvrir de tels emplacements, ces derniers seront inspectés et le niveau d'eau sera abaissé. Les programmes de contrôle des barrages de castor ont toujours existé au CN et l'on continue de prendre des photographies aériennes chaque année afin de les surveiller étroitement dans l'ensemble du réseau.

Le CN a élargi la portée de ses programmes de contrôle des barrages de castor à proximité des remblais de voie afin d'englober, plus précisément, les endroits où l'eau s'accumule en aval de la voie. Il a aussi l'intention, dans les programmes de formation destinés aux effectifs de la voie, d'insister davantage sur les dangers potentiels d'une baisse rapide de niveau d'eau. Une campagne de sensibilisation sera également mise sur pied pour faire ressortir le caractère unique de ce déraillement et pour préciser les mesures à prendre pour éviter qu'il ne se reproduise.

Le service de l'Ingénierie du CN a mis en oeuvre une quatrième recommandation : l'amélioration continue du

système de communications. Au cours de la période qui a suivi l'accident, le CN a rapidement implanté un système radio de secours automatique pour rétablir la communication coupée par le sectionnement des lignes. Il a installé un système de secours qui rétablit la communication vocale dans les 30 secondes suivant une panne en remontant la communication jusqu'au point de coupure. La Compagnie a également augmenté la hauteur de la tour de transmission de la région afin d'éliminer certaines zones de silence.

Formation du personnel

En ce qui concerne la formation, le coroner a recommandé au CN d'entraîner les membres des équipes de train et de voie à reconnaître les situations dangereuses.

Selon Don Holfeld, directeur (réseau) Formation exploitation, «le personnel de voie du CN est formé de manière à bien effectuer l'inspection de la voie et de l'emprise et à surveiller les barrages de castor et les cours d'eau à

Mesures

Suite de la page 11

niveau élevé, comme il est clairement énoncé dans la documentation de formation des agents et des contremaîtres d'entretien de la voie».

On répond également aux besoins des équipes de conduite. Au Centre de formation de Gimli au Manitoba, les mécaniciens stagiaires reçoivent une formation exhaustive, et des cours d'actualisation sont dispensés aux mécaniciens plus anciens. Les cours mettent dorénavant l'accent sur la reconnaissance des conditions anormales sur la voie ou l'emprise, dont les niveaux d'eau élevés attribuables à des barrages de castor.

Matériel de communication

Le coroner a également recommandé l'amélioration du matériel radio portatif et des consignateurs d'événements ainsi que l'installation de balises sur les locomotives de tête. Le CN a sérieusement examiné chacune de ces recommandations.

La Compagnie a étudié la possibilité de distribuer aux équipes de train de grosses radios de 10 watts, mais il a été déterminé qu'une radio plus puissante dans le cas en question n'aurait pas été plus utile. Quelle qu'eût été la radio utilisée, le remblai de 25 pieds aurait perturbé son fonctionnement.

Le CN s'est également penché sur la recommandation du coroner concernant l'amélioration des consignateurs d'événements. Les consignateurs, qui sont déjà présents dans toutes les locomotives de ligne principale du CN, contrôlent et enregistrent la vitesse des trains, les données relatives au fonctionnement des freins et des moteurs et fournissent des données essentielles sur la cause des incidents.

À la fin des années 1980, le CN a équipé la totalité de son parc de consignateurs d'événements à microprocesseurs : il avait alors envisagé la possibilité de les construire comme les boîtes noires des avions. Cependant, les avantages supplémentaires de consignateurs à l'épreuve des chocs, du feu et de l'eau ne justifiaient pas leurs coûts considérablement plus élevés.

La Compagnie a plutôt choisi d'équiper toutes ses locomotives de consignateurs d'événements. Ces derniers sont souples et, dans la plupart des cas, le consignateur d'au moins une locomotive demeure intact et préserve les données. Chaque consignateur d'événements durera encore environ 10 ans.

Le CN a aussi soigneusement étudié la suggestion du coroner d'installer des balises sur les locomotives de tête pour conclure que leur présence ne faciliterait en rien les secours.

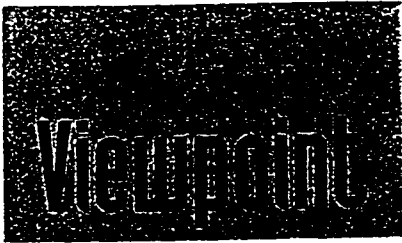
«Les balises sont pratiques et largement répandues dans les navires et les

avions, qui peuvent dévier loin de leur itinéraire», dit Joe Turvolgyi, chef adjoint Traction. «Les locomotives, pour leur part, circulent sur une voie fixe et ne peuvent dévier de la voie. Nous possédons déjà les moyens de repérer un train en détresse.»

Le coroner a aussi demandé de revoir les mesures d'urgence du CN, afin de définir les responsabilités individuelles, s'assurer que le personnel est convenablement formé et dispose de directives écrites, et tenir des exercices d'urgence. Ces activités ont toujours été mises en pratique dans l'ensemble de la Compagnie.

«Les connaissances acquises et partagées lors des séances d'information qui ont suivi l'accident de Nakina et tous les autres incidents nous aident à développer nos mesures d'urgence», dit Dave House, surintendant Transport du district du Nord de l'Ontario.

Enfin, le coroner a suggéré au CN d'informer son personnel des circonstances uniques qui ont entouré l'accident de Nakina. À la suite des analyses détaillées internes du CN, des notes de service ont été distribuées aux personnes intéressées à l'échelle de la Compagnie. Le présent article, en plus de rendre hommage à Gary Stolz, Ron Gadbois et Gerald Ricard, servira à renseigner le personnel du CN sur les causes de cet accident exceptionnel et malheureux et à empêcher qu'un tel événement ne se reproduise.



At home, at work, at play. Safety starts with us.

Accidents don't just happen. They have causes: equipment failure, structural failure, lack of communication, unsafe acts and practices, unsafe situations, human error, or any combination of these. Safety doesn't just happen either. It has a cause: us.

For the company, safety means a major investment in building and maintaining safe track. It means developing safer locomotives and car equipment. It means developing safe operating practices, and training people to use them consistently. It means applying the latest advances in computer and communications technology to the complex task of monitoring the movement of up to 750 trains daily over 30,000 km of track on a real-time basis.

For employees, it means working safely. This, too, is a large responsibility. Each of us is responsible for our own safety. Each of us is responsible for the safety of those around us. And each of us is responsible for seeing that the safety rules are respected.

It's like refusing to allow your children to cross the street on their own. They yell at you: "All the other kids' parents let them do it. You're the meanest mom (or dad) on the street." But you didn't make the rule to be mean — you did it to keep them safe. The same goes for the laws against drinking and driving.

The same goes for any safety rule. Breaking even the most basic one may have dramatic consequences. And not just for ourselves. Our attitudes and our actions affect our co-workers, our friends and our families. We owe it to them to work safely.

None of us can be single-handedly responsible for safety. Creating a safe environment, providing safety training, developing a sensitivity to safety — this all requires teamwork. Employees from every function and department across the system work on Safety and Health Committees. They uncover problems; they propose and implement solutions; they spread the safety message. Above all, they look for ways to increase safety, by improving work practices and procedures. Far too often, they've been our unsung heroes and heroines. In this

issue, we've tried to provide an idea of what they do and how hard they work at promoting safety (see articles starting on page 6).

A new safety poster campaign starts with this issue of *Eye on Safety* (see back cover for first poster in the series of four). The themes: safety starts with us; safety affects our friends and families; safety is a team effort; and safety's reward is customer loyalty. These posters are dramatic and pointed. They're meant to make us all think. They're there to keep us from taking safety for granted and to remind us just how important it is.

Thanks to the safety practices of CN workers, CN has reduced train accidents per billion gross ton miles by 62 per cent in the last ten years and remains one of the safest railways in North America. In accordance with Federal Railway Administration (F.R.A.) criteria, CN ranks second among other Class I railroads for the period from January to June 1992. That's good business. Let's continue the trend.

We wish all members of the CN family a happy, healthy and safe New Year.

Sheryl Curtis
Coordinator

P.S.: *Eye on Safety* has been touring the world. Comments were recently received from a reader in Johannesburg, South Africa.



Safety and health committee work is not for the faint-hearted. Here, members of the Thunder Bay group make their safety walkabout in sub-zero temperatures.

La sécurité, c'est l'affaire de tous !

Les accidents dépendent toujours de quelque chose : défaut du matériel, défaut de fabrication, manque de communication, pratiques et situations dangereuses, erreur humaine, ou une combinaison de ces facteurs.

La sécurité aussi dépend de quelque chose ou plutôt de quelqu'un : nous.

Pour la Compagnie, mettre l'accent sur la sécurité suppose qu'il faut investir massivement dans la construction et l'entretien des voies. Il faut construire des locomotives et des wagons plus sécuritaires ; mettre au point des pratiques plus soucieuses de la sécurité et enseigner au personnel à les respecter ; appliquer les progrès les plus récents en informatique et en communications à la surveillance, en temps réel, des quelque 750 trains qui circulent quotidiennement sur 30 000 kilomètres de voies.

Pour le personnel, la sécurité est une grave responsabilité ! Chacun de nous est responsable de sa propre sécurité. Chacun de nous est responsable de la sécurité de ceux qui l'entourent. Chacun de nous est responsable de l'observation des règles de sécurité.

Dans le fond, c'est un peu comme lorsque nous interdisons à nos enfants de traverser la rue, seuls. «Tous les autres enfants ont droit de le faire !» répliqueront-ils. Pourtant, ce n'est pas par méchanceté que nous leur imposons des règles — mais bien pour les protéger. Tout comme les lois sur la conduite avec facultés affaiblies.



Ne reculant devant rien, les membres du comité de sécurité et de santé de Thunder Bay effectuent leur ronde hebdomadaire malgré le froid sibérien.

Tout comme les règles de sécurité. L'infraction à une règle, si élémentaire soit-elle, peut avoir de graves conséquences. Pas seulement pour nous, mais aussi pour nos collègues, nos amis et nos proches. Nous leur devons donc de travailler prudemment.

Personne ne saurait assumer à lui seul l'entière responsabilité de la sécurité. L'aménagement d'un environnement sûr, la formation en matière de sécurité, la sensibilisation aux méthodes de travail sécuritaires exigent un travail d'équipe. Partout dans le réseau, des employés oeuvrent au sein de comités de sécurité et de santé. Ils travaillent à découvrir des problèmes, à proposer et appliquer des solutions, ainsi qu'à diffuser le message de sécurité. Mais d'abord et avant tout, ils cherchent à améliorer la sécurité, en améliorant les pratiques et méthodes de travail. Ce sont des héros et héroïnes méconnus. Nous nous proposons donc de leur rendre hommage, en leur consacrant ici quelques articles.

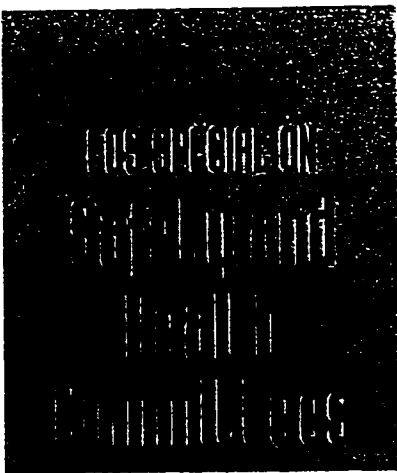
Par ailleurs, *Prévenir* est fier de dévoiler (en page couverture arrière) la première d'une série de quatre affiches exploitant chacune un aspect différent de la sécurité : notre responsabilité, nos proches, le travail d'équipe, les affaires. Dramatiques et lourdes de sens, elles veulent nous amener à réfléchir et à ne plus tenir la sécurité pour certaine.

Dans un autre ordre d'idées, grâce aux bonnes méthodes de travail du personnel, le nombre d'accidents de trains au CN a décliné de 62 pour cent au cours des dix dernières années ; ce qui en fait l'un des chemins de fer les plus sûrs en Amérique du Nord. La Federal Railway Administration place le CN au deuxième rang des chemins de fer de Classe I, pour la première moitié de 1992. C'est bien pour les affaires. Une tendance à perpétuer.

À l'aube de la nouvelle année, nous souhaitons à tous les membres de la grande famille du CN, bonheur, santé et... sécurité.

Sheryl Curtis
Coordonnatrice

P.S. *Prévenir* est lu de par le monde. Nous recevons récemment les commentaires d'un lecteur de Johannesburg, Afrique du Sud.



Powers of Safety and Health Committees

- Receive, consider and deal with complaints related to safety and health.
- Keep records of how the complaints were handled.
- Cooperate with any workplace health service.
- Establish and promote safety and health education programs for employees.
- Participate in all inquiries and investigations related to safety and health.
- Develop, establish and maintain programs, measures and procedures for the protection or improvement of safety and health.
- Regularly monitor programs, measures and procedures.
- Ensure that adequate records are kept on work accidents, injuries, and health hazards and monitor related data.
- Cooperate with safety officers appointed by the Minister of Labour.
- Request from the employer any information considered necessary to identify existing or potential hazards.
- Have full access to government and employer reports related to safety and health with the exception of medical records unless the employee concerned consents to their release.

Productive dialogue results in action

CN has about 145 safety and health committees across the network. These committees consist of elected management and union personnel. They meet monthly during regular working hours, and as required. They are led by two co-chairpersons, one appointed by management, and one elected by the unions. All members have identified roles and responsibilities and their active participation ensures a safe work environment.

"Employee participation is an important part in the success of our company as is their involvement in ensuring a safe workplace" says Guy Lambert, manager, Safety and Loss Control, Western Canada. "Many committees have developed successful safety initiatives and this proactive participation is growing".

"Committee members must play an integral part in planning safety programs" says John Hughes, director,

Safety and Loss Control - East. "These people form the cornerstone in our success in derailment and injury prevention, and workplace health improvement".

The Safety and Loss Control function coaches and guides the safety and health committees so that they can fulfill their duties (see side bar). The Safety function is also a resource in dealing with technical areas related to occupational safety and health.

CN's safety and health committees are invaluable assets to the company. They bring together a team of both management and non-management personnel to resolve safety and health issues. The committees play an important part in making the workplace safer through resolution of problems, and through prevention of hazards before an accident occurs.

Acheson: Successful in getting new shop for welders



As welders at the Acheson Work Equipment Shops in Edmonton work in their spacious new facility this winter, they will be benefiting from an initiative that started with the Acheson Safety and Health Committee three years ago. The committee has 10 employee and management members. Co-chairs are Julius Slanzi, shop superintendent, and mechanic Dave Labatiuk, who is a member of the Brotherhood of Maintenance of Way Employees.

It was through the committee that the work equipment employees raised their concerns about the old welding shop. It was too small for the work being carried out there, and this could have an impact on safety. The exhaust fans were inadequate, so smoke and fumes from welding built up inside the shop particularly in winter, when doors had to be kept shut. Some types of

welding are excessively noisy, which created an increased noise level for other workers in the repair shop.

Efforts were made to improve the situation, but the committee came to the conclusion that the only solution was to build a separate shop to house the welders. Expenditure for the new shop was approved, and work began in June 1993. It was completed by the fall.

The new shop has about twice the space of the old one, so there is more room to work safely. It is a separate building from the main repair shop, so other workers are not bothered by the noises of welding. But, at the suggestion of the committee, it also has a connecting passage and doors so that employees can walk from one building to the other without having to go outdoors in Alberta's winter weather. The new shop has a 10-ton overhead crane in place of the old two-ton one, which enables heavier lifts to be handled with a greater degree of safety.

Says Mr. Slanzi: "The new shop offers great improvements in air quality and noise reduction, as well as being a safer place to work. The committee can be proud of their success in getting a new shop. When we sit down around the table we aren't management and union. Each person has only one vote — and the same concern for safety and health in the workplace."

Les comités de sécurité et de santé Un atout précieux

Au CN, près de 145 comités de sécurité et de santé sont dispersés dans tout le réseau. Les membres, qui sont désignés par voie d'élection, représentent à la fois le personnel syndiqué et la direction : ils se réunissent au moins une fois par mois, ou plus si les besoins le justifient, durant les heures de travail. Ils ont à leur tête deux coprésidents, l'un désigné par la Compagnie et l'autre par les syndicats. Tous les membres doivent s'acquitter de responsabilités précises et jouer un rôle actif dans la création et le maintien d'un lieu de travail sûr et sain.

«Tous les membres du personnel contribuent au succès de l'entreprise entre autres, en assurant le maintien d'un lieu de travail sécuritaire», souligne Guy Lambert, directeur Sécurité et contrôle des pertes pour l'Ouest. Plusieurs comités ont d'ailleurs mis sur pied, avec succès, d'importantes initiatives en matière de sécurité et ce mouvement s'étend dans tout le réseau.»

«Les membres des comités doivent faire partie intégrante du processus de planification des programmes de sécurité», précise John F. Hugues, directeur Sécurité et contrôle des pertes pour l'Est. Ils sont la pierre angulaire de notre réussite en matière de prévention des déraillements et des blessures et contribuent grandement à l'amélioration de la santé au travail.»

Quant au personnel du service Sécurité et contrôle des pertes, il fournit l'aide et les conseils nécessaires aux comités afin qu'ils puissent s'acquitter de leurs obligations. Il constitue aussi une ressource précieuse sur les aspects techniques de la sécurité et de la santé au travail.

Au CN, les comités de sécurité et de santé constituent un atout inestimable car en réunissant à une même table employeur et employés pour discuter de problèmes concrets et de prévention, ils contribuent largement à rendre les lieux de travail plus sûrs et plus sains.

Les fonctions d'un comité de sécurité et de santé

- Recevoir et étudier les plaintes touchant la sécurité et la santé et y donner suite
- Enregistrer les mesures prises relativement aux plaintes reçues
- Mettre sur pied et promouvoir des programmes qui sensibilisent les employés aux questions de sécurité et de santé
- Participer à toutes les enquêtes et études touchant la sécurité et la santé
- Concevoir, mettre sur pied, et maintenir des programmes, des mesures et des procédures de protection du personnel ou d'amélioration de la sécurité et de la santé au travail
- Veiller à la tenue de dossiers appropriés sur les accidents de travail, les blessures et les risques pour la santé, et vérifier les données qui y figurent
- Collaborer avec les agents de sécurité nommés par le ministre du Travail
- Demander à l'employeur les renseignements qu'il juge nécessaires pour bien déterminer les risques réels ou potentiels
- Avoir librement accès aux rapports du gouvernement et de l'employeur sur la sécurité et la santé à l'exception des dossiers médicaux de l'employé ou employée, à moins que ce dernier ou cette dernière n'y consente



Les soudeurs des ateliers de matériel de travaux d'Acheson, à Edmonton, travailleront dans un nouveau et spacieux local cet hiver, grâce aux efforts qu'a entrepris le comité de sécurité et de santé d'Acheson il y a trois ans. Le comité, qui est formé de dix membres du personnel et de la direction, est coprésidé par Gullius Slanzi, surintendant de l'atelier, et par le mécanicien Dave Labatiuk, membre de la Fraternité des préposés à l'entretien de la voie.

C'est par le truchement du comité que le personnel du Matériel de travaux a exprimé ses préoccupations concernant l'ancien atelier de soudage. Il était trop petit pour les travaux qui y étaient effectués, ce qui compromettait la sécurité. Les ventilateurs d'échappement n'étaient pas adéquats, de sorte que la fumée et les gaz de soudage s'accumulaient dans l'atelier, particulièrement en hiver, lorsqu'il fallait garder les portes fermées. De plus, certaines techniques de soudage sont excessivement bruyantes, ce qui augmentait le niveau de bruit pour les autres ouvriers dans l'atelier.

Acheson Nouvel atelier de soudage plus sécuritaire

On a essayé d'améliorer la situation, mais le comité a conclu que la seule solution consistait à construire un atelier de soudage séparé. Les fonds ont été dégagés et les travaux ont commencé en juin 1993. La construction a été achevée à l'automne.

Le nouvel atelier est environ deux fois plus grand que l'ancien, ce qui rend le travail plus sûr. De plus, il est séparé de l'atelier principal, de sorte que les autres travailleurs ne sont pas importunés par le bruit du soudage.

Toutefois, à la suggestion du comité, on a également construit un passage équipé de portes pour relier les deux ateliers, ce qui permet aux employés de circuler d'un atelier à l'autre sans avoir à sortir et braver les rigueurs de l'hiver albertain. Le nouvel atelier est doté d'un pont roulant de 10 tonnes, qui remplace l'ancien pont de deux tonnes. Le nouveau pont roulant permet de manipuler des charges plus lourdes de manière plus sûre.

«Le nouvel atelier présente de grandes améliorations en ce qui concerne la qualité de l'air et le niveau de bruit, et constitue un lieu de travail plus sûr. Le comité peut être fier de sa réussite. Lorsque nous siégeons au comité, il n'y a pas de direction ni de syndicat : chaque personne possède un seul vote et le même intérêt pour la sécurité et la santé au travail», dit M. Slanzi.

Melville targets safety at level crossings

The Interfunctional safety and health committee in Melville, Sask., has given a high priority to level crossing safety, and its efforts are being recognized both within the railway and in the community at large. Co-chairs of the 10-member committee are Randy Clearwater, manager train service, and conductor Del Killick, representing the UTU.

Explains Mr. Clearwater: "The committee is concerned over the toll of death and injuries caused by drivers who take chances at level crossings, and children and others who trespass on railway property. There is also growing recognition that after these accidents train crews may suffer from critical incident stress — re-living again and again those moments when they headed down the track towards a crash they were powerless to avoid. You can't take evasive action with a train — only put on the brakes, blow the whistle and hope for the best."

Employees volunteer time

So the committee made arrangements for locomotive engineers, conductors and other railway employees to volunteer their time to go to local schools, service clubs and safety

organizations and communicate the need for greater care at level crossings and on railway property. Audiences include drivers' education classes at Melville Composite High School and trucking companies.

Says Clearwater: "We don't have any CN Police stationed in Melville to carry out these presentations, so we wanted to expand the range of the Operation Lifesaver program in our community."

Audiences are impressed by hearing employees tell first-hand of narrow escapes and accidents they have experienced at loca-

tions the audience knows. Speakers bring with them photos of cars damaged in local accidents to drive home the message.

"People are often not aware of the speed that trains travel, how long it takes them to stop, and the need to look out for trains at level crossings — particularly these days when so many people have car stereo systems that drown out the sound of train whistles," says Clearwater.

The local news media have also taken an interest in the safety and health committee's efforts, and have carried stories and pictures of an engineer's eye view of a car trying to beat a train across a level crossing. For the committee, the payoff comes when fewer drivers in Melville and area take such dangerous risks, and stress-causing critical incidents are reduced.



Left to right: Randy Clearwater, Jim Somerville, Dave Matichuk, Darryll Stein and Don Nixon. Del Killick was absent when the photo was taken.

Talbotville-St. Thomas: Members speak out



Jean-Yves Lamy

asked some of the members of the Joint CN Norfolk Southern Corporation Health and Safety Committee for St. Thomas and Talbotville, Ontario for their comments about safety in the workplace. Those interviewed spoke about the benefits of a two-railroad committee. It seems there are no corporate boundaries when it comes to workers' safety.

"Safety is the number one priority in the Transportation portion of the operation. A safe work environment for my employees is one of my major goals. Norfolk Southern's employees contribute by keeping us that much more aware of any problems regarding safety issues."

Brian Hamilton, manager, Train Service, CN, and Committee co-chairman

"I've seen megafold improvements in safety as a result of this committee. Everything gets done that much more quickly. The committees are a step in the right direction for the railroads, for the workers and for their families. We want to do our part to keep accident ratios as low as possible."

Mike Whitchurch, conductor, Norfolk Southern, and Committee co-chairman



Phil Dickson and Paul Smith

"Hearing both the union and management sides to a safety issue at the table is mutually beneficial. At the same time, both railroads benefit from each other's presence. In the five or six years I've been a member, there's been a very low turnover, and that's

encouraging. Our debates are congenial and productive."

Phil Dickson, trainman, CN

"While office workers are in a different environment than the running trades, our commitment to safety is just as strong. Whether you're lifting a rail at trackside or handling boxes in the office, you've got to keep safety in mind."

Jean-Yves Lamy, train movement clerk, CN

"I've been involved since the committee's inception and I've seen tremendous results. It's very fulfilling to see our fourth year without a lost-time injury. The committee lets us talk to management one on one and get results."

Blair Clarke, engineer, Norfolk Southern



Mike Oakley

Melville

Priorité à la sécurité aux passages à niveau

Le comité de sécurité et de santé de Melville (Saskatchewan) s'est donné une nouvelle priorité : la sécurité aux passages à niveau. D'ailleurs, ses efforts lui ont déjà valu la reconnaissance du chemin de fer et celle de la collectivité en général. Formé de dix membres, le comité est présidé à la fois par Randy Clearwater, directeur Service des trains, et par Del Killick, chef de train et représentant des TUT.

Comme l'explique M. Clearwater, «le comité s'inquiète du grand nombre de morts et de blessés causés par les conducteurs qui prennent des risques aux passages à niveau, et par les enfants et les adultes qui s'introduisent illégalement sur la propriété du chemin de fer. On s'inquiète aussi de plus en plus du stress causé par des accidents de cette nature chez les membres d'une équipe de train, qui vivent et revivent les moments où ils s'avançaient sur la voie, impuissants à éviter la collision. C'est qu'il est impossible de faire dévier un train de sa route — on peut juste serrer les freins, faire retentir le sifflet de locomotive et croiser les doigts».

Le comité s'est donc arrangé pour que mécaniciens de locomotive, chefs de train et autres cheminots donnent de leur temps afin de sensibiliser les gens au besoin de redoubler de vigilance aux passages à niveau et sur la propriété du chemin de fer. La tournée les amènera à visiter les écoles,

les associations et les organismes de sécurité de Melville : déjà, le message a été diffusé aux élèves de l'école de conduite automobile du Melville Composite High School ainsi qu'à certaines entreprises de camionnage.

D'ajouter M. Clearwater : «Le CN n'a pas d'agent de police en poste à Melville pour s'occuper de l'Opération Gareautrain, mais nous voulions quand même en élargir la portée chez nous.»

Les auditoires sont toujours impressionnés d'entendre, de première main, les récits d'accident ou de quasi-accident qu'ont vécu des employés, à des endroits qui leur sont familiers. Les con-

férenciers apportent des photos de véhicules endommagés à la suite d'accidents qui se sont produits dans les environs, pour renforcer le message.

«Bien des gens ignorent la vitesse à laquelle les trains roulent ou le temps qu'ils mettent à s'arrêter, d'où la nécessité de prendre garde aux passages à niveau. Et c'est encore plus vrai aujourd'hui, maintenant que de plus en plus de véhicules sont équipés de chaînes stéréophoniques puissantes qui enterrent le sifflet du train», souligne M. Clearwater.

Les efforts du comité ont attiré l'attention des médias locaux : ils y ont consacré des reportages, accompagnés de photos qui montrent, du point de vue du mécanicien de locomotive, une voiture s'engager devant le train à un passage à niveau. Pour le comité, la récompense viendra lorsque de moins en moins de conducteurs de Melville et des environs devront courir de tels risques, et qu'il y aura une réduction du nombre d'incidents critiques.



De g. à d. : Randy Clearwater, Jim Somerville, Dave Matichuk, Darryl Stein et Don Nixon. Del Killick était absent au moment de la photo.

St. Thomas-Talbotville : La parole est aux membres



Jean-Yves Lamy

Prévenir a demandé à des membres du comité conjoint de sécurité et de santé CN-Norfolk Southern Corporation de la région St. Thomas-Talbotville, en Ontario, s'ils avaient des observations à faire sur la sécurité en milieu de travail. Les personnes interviewées ont parlé des avantages d'avoir un comité formé d'employés appartenant à deux chemins de fer.

Tout indique qu'il n'y a pas de cloisonnement entre l'un et l'autre lorsque la sécurité des travailleurs est en cause.

«La sécurité est la grande priorité dans le volet transport de nos activités d'exploitation. L'un de mes principaux objectifs est d'assurer un milieu de travail sécuritaire aux employés. Les employés de Norfolk Southern apportent, eux aussi, leur contribution en nous informant de tout problème portant sur la sécurité.»

Brian Hamilton, coordonnateur de trains au CN et coprésident du comité

«J'ai constaté des progrès considérables en matière de sécurité à la suite de la formation de ce comité. Tout se fait beaucoup plus rapidement. Les comités constituent un pas dans la bonne direction pour les chemins de fer, pour les travailleurs et pour les familles. Nous voulons faire notre part pour qu'il y ait le moins d'accidents possible.»

Mike Whitchurch, chef de train, Norfolk Southern et coprésident du comité



Phil Dickson et Paul Smith

«Il est instructif pour tout le monde de connaître les points de vue du syndicat et de la direction concernant tel ou tel problème de sécurité. Chaque chemin de fer profite de la présence de l'autre. Durant les cinq ou six années de ma participation au comité, il y a eu très peu de va-et-vient

parmi les membres, et c'est encourageant. Nos discussions sont agréables et productives.»

Phil Dickson, agent de train, CN

«Même si les employés de bureau travaillent dans un contexte différent de celui du personnel itinérant, la sécurité nous tient à cœur tout autant. Qu'on soulève un rail sur la voie ferrée ou des boîtes dans un bureau, il faut toujours penser à la sécurité.»

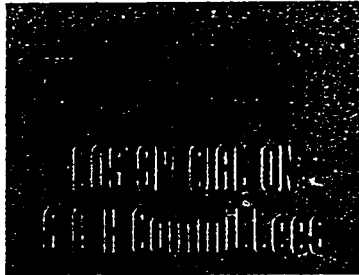
Jean-Yves Lamy, commis mouvement des trains, CN

«Membre du comité depuis sa création, j'ai pu constater toute l'ampleur des résultats. Il est très satisfaisant de voir que, depuis quatre ans, il ne s'est produit aucun accident ayant occasionné des heures de travail perdues. Grâce à la présence du comité, nous pouvons parler d'égal à égal avec la direction et obtenir des résultats.»

Blair Clarke, mécanicien, Norfolk Southern



Mike Oakley



One for all and all for one!

Eye on Safety took advantage of the monthly meeting of the Montreal, South Shore, and Ottawa Signals and Communications Committee held on November 10 to ask its members for their opinion on safety and how they view their role on a safety and health committee.

Marcel Turcotte

I've been a Committee member for over 10 years and to me, safety is a priority. There's no doubt that thanks to the information that's available to us, we're in the best position to promote safety and set an example for our co-workers. On the other hand, people tend to look at how we act and sometimes blame us if things don't work out as they wanted.

Michel Geneau

I believe in safety because I want to keep my hands, my arms, and the rest of my body in one piece. I also want to help others do the same. When you're on a committee, you're better informed about the latest developments in safety matters, but it's not always easy to discuss this news with co-workers.

Jean-Paul Bisailon

In my opinion, the ideal situation would be for all employees to be on a committee. That way, they'd really understand the problems and they'd realize that talking about problems in a group helps find solutions. Myself, I've come to realize that we're not all alone when it comes to looking after our own safety and that it's in our interest to use the methods and equipment that have been provided to protect us against accidents and injuries.

Yves Séguin Co-Chairman - Union

Safety is a cause I firmly believe in, so my participation on the Committee gives me great personal satisfaction. Besides, I hope that the outcome of our discussions will benefit all CN employees. It's very stimulating to exchange points of view between Union and Management representatives, since in most cases, we have to find a joint solution to a problem. As a Committee member, I try to set an example and I hope my attitude has a positive influence on my co-workers and the people around me in general.

Marc Fournier

I like to be a spokesman for my co-workers at Committee meetings, and then, in return, inform them about safety matters. I also believe that there is a way of approaching people when it comes to safety. Someone who doesn't respect the rules

must be brought back into line — diplomatically. We have to take the opportunity to show him/her that working safely has more advantages than inconveniences.

Pierre Jacob

My participation on the Committee gives me an opportunity to become well-informed on safety matters. When I leave one of the meetings, my head is filled with good ideas and I feel better able to get my message across. Unfortunately, we can't solve the problems as quickly as we'd like. Often, I feel caught between my co-workers' concerns and Management's replies.

Louis St-Amour

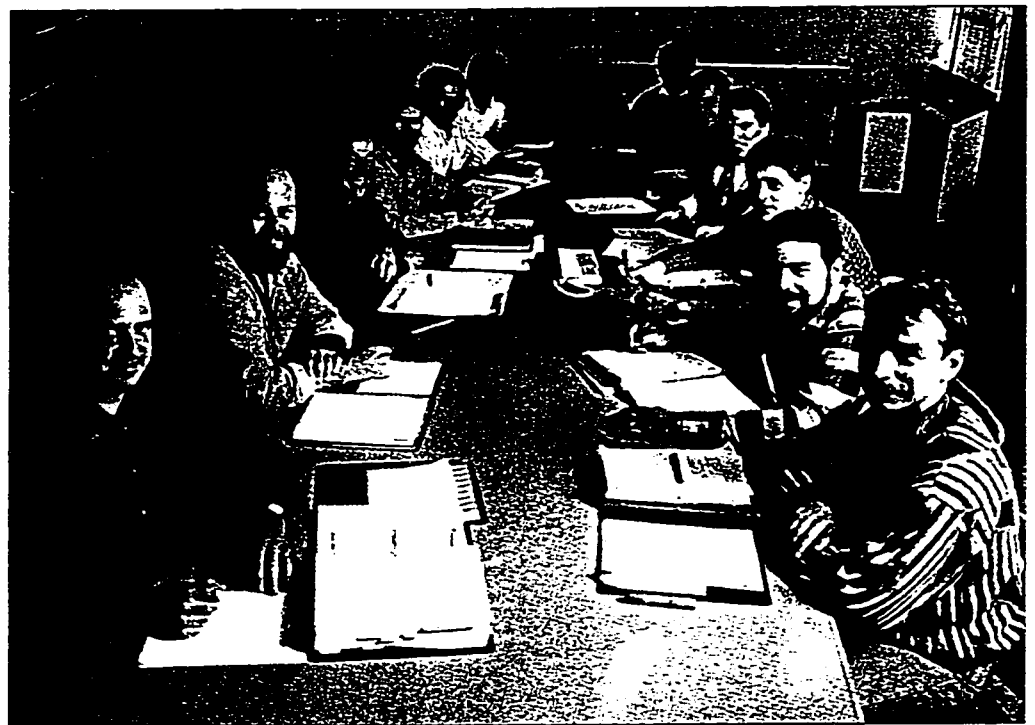
My participation on the Committee gives me the opportunity to find out what other

Jules Delorme

It's been a number of years now that I've been giving my time over to safety matters. I do it for my own good and for my co-workers as well, to prevent people from injuring themselves. I've noticed that for a few years now, safety is discussed much more than before and this has led to substantial improvements. The Committee meetings provide us with an opportunity to exchange viewpoints, find solutions to problems, and acquire many new ideas.

Serge Séguin

It's almost a year now that I've been part of this Committee and I realize that we're often faced with complex problems that aren't easy to solve quickly. Personally, I've



The Committee members appear in the order in which they speak, starting with Marcel Turcotte, bottom right-hand corner, and proceeding counter clockwise around the table.

departments' concerns are. I find it somewhat comforting to see that my department isn't the only one to experience such a problem, for example. I feel that we still have a way to go before a really preventive attitude is shared by everyone. It seems as though instead of wanting to find solutions, people prefer to find a guilty party. To me, it would be a good idea for Committee members to be replaced more often, to allow more employees a chance to take part in the work of a Safety and Health Committee. In my opinion, this is the best way to increase employees' awareness of safety matters.

always tried to work safely, but that's not enough, since safety is like a chain. And every link in that chain must be secure. We've made progress in that direction but there's still room for improvement.

Jacques Larochelle

To begin with, I must say that it's more out of curiosity that I decided to join the Committee. With the passing years, I'm more and more convinced that our cause is worthwhile. The discussions we have during

One for all — continued on next page

One for all

continued from page 8

our meetings are very constructive; however, the message is still not easy to get across. I find that people don't usually tend to follow the Committee's recommendations.

Louis Poirier

Personally, I believe that safety is more a matter of attitude than a matter of cost. I notice that our operating methods have improved and I find that encouraging. My work involves travelling in the region, but I do my utmost to attend the Committee meetings, because I find the discussions to be very beneficial. Life is precious and we must never forget that.

Michel Lamer

By being on the Committee, I'm learning a lot about safety - the new regulations that must be enforced and the problems faced by the other members, for example. Since I work alone most of the time, it's important for me to be able to exchange viewpoints with other people; however, once I get back to work, I don't have many people to convince... But I tell myself that each person's contribution is important and that the least little action that we take in the interest of safety counts a great deal.

Gilbert Fiset Co-Chairman - Management

I'm a Committee member because I believe that safety is important and I want to promote it and have it enforced. What I find interesting in our work is that the solutions

we suggest are based on our discussions and that they're not imposed on us from outside. So we really have the feeling that our contribution to safety is significant. Since January 1993, for example, 19 items on the agenda have been solved and 6 are still holding. We're quite proud of these results, which clearly show that the Committee isn't meeting just to hold futile discussions, but rather to take action to improve everyone's safety.

Luc Richard and Alain Lafleur were unable to attend the meeting.

Montréal, Rive-Sud et Ottawa Tous pour un et un pour tous !

Pierre Jacob

Je dirais que ma participation au comité me permet de faire le plein en matière de sécurité. Lorsque je repars de la réunion je suis rempli de bonnes idées et je me sens davantage capable de faire passer mon message. Malheureusement, les solutions aux problèmes ne viennent pas aussi rapidement qu'on le voudrait. Souvent je me sens un peu coincé entre les préoccupations de mes collègues et les réponses de la Compagnie.

Louis St-Amour

Ma participation au sein du comité me permet de connaître les préoccupations des autres services. J'éprouve un certain réconfort de voir que le service auquel j'appartiens n'est pas le seul à vivre tel problème, par exemple. On a encore du chemin

quelques années on parle beaucoup plus de sécurité qu'avant et que cela a apporté beaucoup d'amélioration. Les rencontres du comité nous permettent d'échanger, de trouver des solutions aux problèmes et de faire le plein d'idées.

Serge Séguin

Je fais partie de ce comité depuis presque un an et je me rends compte que nous faisons souvent face à des problèmes complexes auxquels il est difficile de trouver des solutions rapides. Personnellement, j'ai toujours essayé de travailler de façon sécuritaire mais ce n'est pas suffisant parce que la sécurité c'est une chaîne. Tous les maillons doivent se tenir. Nous avons fait des progrès en ce sens mais il reste encore du chemin à parcourir.

Prévenir a profité de la réunion mensuelle du comité Signalisation et communications Montréal, Rive-Sud et Ottawa, qui se déroulait le 10 novembre dernier, pour demander à ses membres ce qu'ils pensent de la sécurité et comment ils voient leur rôle au sein d'un comité de sécurité et de santé

Marcel Turcotte

Pour moi, qui suis membre d'un comité depuis plus de 10 ans, la sécurité, c'est prioritaire. Grâce à l'information dont nous disposons, nous sommes les mieux placés pour faire la promotion de la sécurité et donner l'exemple à nos collègues de travail. Le revers de la médaille : les gens ont tendance à nous regarder agir et ils nous font parfois porter le blâme si les choses ne se passent pas comme ils le veulent.

Michel Geneau

La sécurité j'y crois parce que je tiens à garder mes mains, mes bras et le reste intacts. Je veux aider les autres à faire de même. Quand tu fais partie d'un comité, tu es plus informé de ce qui se passe en sécurité mais il n'est pas toujours facile d'en parler avec les collègues.

Jean-Paul Bisailon

Pour moi, l'idéal serait que tous les membres du personnel puissent faire partie d'un comité. De cette façon, ils connaîtraient vraiment les problèmes et ils se rendraient compte que le fait d'en parler en groupe aide à trouver des solutions. Je me rends compte que l'on n'est pas seul à faire sa sécurité et que l'on a avantage à utiliser les méthodes et les équipements qui sont mis à notre disposition pour nous protéger d'un accident ou d'une blessure.

Yves Séguin

coprésident, représentant les employés

La sécurité, c'est une cause à laquelle je crois fermement donc ma participation au sein du comité m'apporte une grande satisfaction. De plus, j'espère que le fruit de nos discussions bénéficiera à l'ensemble du personnel CN. Les échanges de points de vue entre représentants syndicaux et patronaux sont très stimulants puisqu'ils visent à trouver une solution conjointe à un problème. En tant que membre d'un comité, j'essaie de donner l'exemple et j'espère que mon attitude a une influence positive sur mes collègues et sur mon entourage en général.

Marc Fournier

J'aime bien me faire le porte-parole de mes collègues lors des réunions du comité et en retour les informer de la sécurité. Je crois aussi qu'il y a une façon d'aborder les gens lorsqu'il est question de sécurité. La personne qui ne respecte pas les règles doit être ramenée à l'ordre, mais avec diplomatie. Il faut profiter de cette occasion pour lui démontrer que travailler de façon sûre comporte beaucoup plus d'avantages que d'inconvénients.



Les membres du comité apparaissent dans l'ordre de leur intervention, en commençant par Marcel Turcotte, en bas à droite, et en suivant le sens contraire des aiguilles d'une montre.

à faire avant d'avoir une attitude vraiment préventive. On dirait qu'au lieu de vouloir trouver des solutions les gens préfèrent trouver un coupable. Il serait bon que les membres du comité changent plus souvent pour permettre au plus grand nombre possible d'employés de participer aux travaux d'un comité de sécurité et de santé. Pour moi, c'est la meilleure façon de conscientiser davantage le personnel en matière de sécurité.

Jules Delorme

Depuis plusieurs années je donne de mon temps pour la sécurité. Je le fais pour mon mieux-être et celui de mes collègues, pour empêcher les gens de se blesser. Je remarque que depuis

Jacques Larochelle

Au début, je dois dire que c'est plutôt par curiosité que j'ai décidé de me joindre au comité. Avec le temps, je suis de plus en plus convaincu que notre cause en vaut la peine. Les discussions que nous avons lors des rencontres sont très constructives mais le message reste quand même difficile à passer. Je trouve que les gens ont peu tendance à suivre les recommandations du comité.

Tous pour un — suite à la page 9

Tous pour un

suite de la page 8

Louis Poirier

Personnellement, je crois que la sécurité c'est plus une question d'attitude que de coûts. Je constate que nos méthodes se sont améliorées et je trouve cela encourageant. Mon travail m'amène à voyager dans la région mais je fais tout en mon possible pour assister aux réunions du comité car je retire beaucoup des échanges que nous avons. La vie c'est précieux, il ne faut jamais l'oublier.

Michel Lamer

En faisant partie du comité, j'apprends plusieurs choses sur la sécurité. Les nouveaux règlements qui doivent être appliqués, les pro-

blèmes auxquels les autres membres sont confrontés, etc. Comme je travaille seul la plupart du temps, c'est important pour moi de pouvoir échanger avec d'autres personnes. Par contre, de retour au travail, je n'ai pas grand monde à convaincre... Malgré tout, je me dis que la contribution de chacun est importante et que le moindre geste en faveur de la sécurité compte pour beaucoup.

Gilbert Fiset

coprésident, représentant l'employeur

Je suis membre du comité parce que je crois à l'importance de la sécurité et que je veux la promouvoir et la faire appliquer. Le plus intéressant dans notre travail, c'est que les solutions que

nous proposons viennent d'une discussion, elles ne nous sont pas imposées de l'extérieur. Nous avons donc vraiment le sentiment que notre apport à la sécurité est significatif. Depuis janvier 1993, par exemple, 19 points à l'ordre du jour ont été résolus et six restent encore en suspens. Nous sommes assez fiers de ces résultats qui démontrent bien que le comité ne se réunit pas pour tenir des discours creux mais bien pour agir en faveur de l'amélioration de la sécurité de tous.

* Étaient absents lors de la réunion
Luc Richard et Alain Lafleur.

Saint John Committee meetings produce results

Eye on Safety recently travelled to New Brunswick to attend a Saint John Operations Safety and Health Committee meeting. The combined labour-management group meets once a month to discuss safety and health issues — and to resolve them.

Mike McMackin, assistant track maintenance foreman, chaired this particular meeting at the end of October. Also attending were Winston Barbour, carman; Brian Hay, locomotive engineer; Pat Adams, assistant track supervisor; and Ed Jefferson, carman, who sat in for fellow carman Gordie Maher. Committee members Bob Gould, trainman; and John Fraser, manager, Train and Equipment Services, were also unable to attend.

Tabled for discussion that morning were a number of issues: cutting bushes, raising a low spot near a switch, repairing potholes, purchasing sun-screen dispensers, and raising awareness of the dangers of wearing white and brown during hunting season. The group also spoke about donations to a local children's hospital, Operation Lifesaver visits to schools, and equipment maintenance issues.

Adams mentioned how a subcommittee had developed a display board for the local yard office to show the yardmaster where crews were working. He explained that the system uses red tags to show work in progress, and yellow to represent travel-

While the meeting content was interesting enough, it was the process that was particularly noteworthy. How each meeting is run, according to Barbour, is the product of a constitution which the group drew up, based on an existing humpyard committee constitution which was in turn developed as a result of the Safety and Health Committee Training Course.

"Our meetings follow a set agenda, and everyone has a chance to speak," says Barbour. "We also set out to leave our meet-

important in order to build and maintain employees' confidence in the committee's ability to get things done. We also post our minutes on the bulletin boards."

Evidently, that well-organized approach is working. According to Jefferson, safety has improved, injuries are down, and the committee is very action-oriented. He also remarks that employees can rely on the committee to respond to their safety requests and observations.

Coworkers' confidence is all-important to any safety committee, because employees are its eyes and ears on the job site. The better a committee's results, the more employees are apt to report to it. At the same time, the more employees report to a committee, the better its results.

"People are more conscious of health and safety because they know it could affect their jobs if they're disabled," says McMackin. "They don't have to be told to wear earplugs to protect their hearing, and safety glasses. At

the same time, they don't hesitate to tell us if they spot something out of the ordinary."



From left to right: Pat Adams, Winston Barbour, Mike McMackin, Brian Hay and Ed Jefferson

ings with action steps which clearly outline which individual is going to do what to resolve a particular safety issue. That's

Saint John

L'efficacité est à l'ordre du jour

Prévenir assistait récemment à une réunion du comité de sécurité et de santé Exploitation de Saint John (N.-B.), un groupe patronat-ouvrier qui se réunit une fois par mois pour discuter des problèmes de sécurité et de santé... et pour les régler.

Mike McMackin, contremaître adjoint de la voie, présidait cette réunion, à laquelle assistaient aussi : Winston Barbour, wagonnier ; Brian Hay, mécanicien de locomotive ; Pat Adams, superviseur adjoint Voie ; et Ed Jefferson, wagonnier, qui remplaçait son collègue, Gordie Maher. Deux personnes étaient absentes, soit Bob Gould, agent de train, et John Fraser, directeur Services des trains et du matériel roulant.

À l'ordre du jour : enlèvement des broussailles, élévation d'un point bas à proximité d'un aiguillage, réparation de nids-de-poule, achat d'un distributeur d'écran solaire, de même qu'un rappel sur le danger de porter des vêtements blancs et bruns en période de chasse. On a aussi parlé de dons à un hôpital pour enfants, de la tournée de l'Opération Gareautrain dans les écoles ainsi que de l'entretien du matériel.

M. Adams a mentionné la création d'un tableau d'affichage au bureau local afin d'informer le chef de triage des endroits où des équipes faisaient des travaux. Des fanions rouges indiquent des travaux en cours et des fanions jaunes, des équipes en déplacement.

L'ordre du jour était certes intéressant, mais c'est surtout le processus qui nous a impressionné. Chaque réunion, explique M. Barbour, se déroule selon une constitution qui s'inspire de celle qu'un comité d'un triage à butte avait mis au point à la suite d'un cours de formation sur les comités de sécurité et de santé.

«Nos réunions respectent l'ordre du jour établi et tous ont la chance de s'exprimer, dit M. Barbour. Nous ne levons la séance qu'après avoir défini clairement, qui fera quoi afin de résoudre un problème donné. C'est important si l'on veut bâtir et entretenir la confiance des

employés. En outre, nous diffusons nos procès-verbaux sur les tableaux d'affichage.»

Il ne fait aucun doute que cette organisation est efficace. M. Jefferson rapporte que la sécurité s'est améliorée et que le nombre de blessures a diminué. Comme le comité agit plus qu'il ne parle, les employés savent qu'ils peuvent compter dessus pour donner suite à leurs préoccupations et à leurs observations en matière de sécurité.

Somme toute, un comité de sécurité doit absolument avoir la confiance des employés qu'il représente, puisqu'ils sont ses yeux et ses oreilles

sur le terrain. Plus ses résultats sont bons, plus les employés voudront lui signaler des choses. Le contraire est aussi vrai. Plus les employés signalent d'anomalies au comité, meilleurs sont ses résultats.

«Les gens font plus attention à la santé et à la sécurité parce qu'ils savent qu'une invalidité pourrait avoir des répercussions sur leur emploi, souligne M. McMackin. Ils n'ont pas à se faire dire de porter des protecteurs d'oreilles ou des lunettes de sécurité. En même temps, ils n'hésitent pas à nous informer lorsque quelque chose cloche.»



Dans le sens des aiguilles d'une montre : Pat Adams, Winston Barbour, Mike McMackin, Brian Hay et Ed Jefferson.

Thunder Bay

Walkabout committee takes bear problem in its stride

The Thunder Bay Transportation Safety and Health Committee believes in taking the committee to the workplace instead of the other way around. They gather at 8 a.m. on the fourth Wednesday of every month and spend the morning walking around one of the three main yards in the area — Thunder Bay North, Neebing or Mission — looking for safety issues, talking with the employees at their jobs, and taking immediate action if required.

Then they meet in a committee room in the afternoon to decide on further actions to be taken to resolve the safety issues uncovered during their walkabout. Co-chairs of the committee are Steve Canellos, manager, train services, and Ron Hodges, service representative with the Canadian Brotherhood of Railway, Transport and General Workers. Says locomotive engineer Ken Jones, who represents the Brotherhood of Locomotive Engineers: "At the safety committee, each member — employee or management — has an equal voice, and every point of view is listened to."

Positive action

Among the positive actions that have resulted from the Thunder Bay approach are:

- the removal of redundant underground

gasoline tanks from the former CN Express building in Thunder Bay North. The building has now been leased to a non-CN company that didn't need the tanks. They still contained some gasoline and fumes. If they had been allowed to deteriorate they could have created a safety hazard, or could have leaked and created an environmental situation that would have been expensive to clean up.

- Walkabouts revealed that the loading dock at the same building was deteriorating and creating a safety hazard during switching. It had to be either repaired or removed. As a result of a letter to the new tenant, the dock was removed.

- In the Mission yard, the committee found black bears pose a threat to workers at certain times of the year. They arranged to borrow a bear trap that captures the animals alive so that they can be released in a remote area. So far three bears have been captured and released, and the committee is now investigating the purchase of its own bear trap.

Says Mr. Canellos: "By going

out on our walkabouts we learn at first hand of the safety issues that are concerning employees. We can see the problem ourselves, and listen to what the people who work with it have to say. Then we follow up in our afternoon meetings."

In addition to touring company property the committee also visits the adjoining premises of industries and other major customers served by CN. This develops close cooperation with the safety efforts of these businesses, and results in safer operations for both CN and their employees.



The Thunder Bay Safety and Health Committee. From l. to r.: Paul Beazley, Gene Abraham, Jack Sanderson, Ken Jones, Ivan McDonough, Rosemary Marasco, Ron Hodges and Earl Taylor. Steve Canellos is missing from the picture.

Halifax

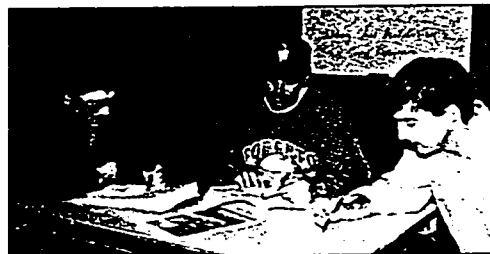
Weathers all safety challenges

The three-member Fairview Shop Health and Safety Committee faces some unique challenges at the Halifax Equipment Shop in Nova Scotia. For one thing, the shop is the only outdoor facility of its kind at CN.

"We can have rain, hail or snow all in the same day," says Graham Yeadon, equipment supervisor and the committee's management voice. "Around Halifax, we say that if you don't like the weather, wait a minute."

The committee must contend with snow removal, frozen hydraulic oil and slower air jacks in winter; and the heat and ultraviolet rays of summer. Carman Dan Jones explains that the committee has to keep one step ahead of the weather.

The group's meetings can sometimes be stormy as well. According to carman Mike Fraser, while arguments do arise, they are always productive. As committed volunteers, the members want to ensure that their fellow



Dan Jones, Mike Fraser and Graham Yeadon

workers get home "safe and sound" to their families at the end of every shift.

"With only three members, we're always on the lookout for the usual aggressive, easygoing types to join us," says Yeadon. "And I'm quite serious. There's a lot of give and take involved in a safety committee."

While the three members do have their healthy disagreements, they all concur that their work is paying off. They find that there is a greater tendency for employees to report

problems if they believe that their actions will bring about safety improvements. According to the members, the employees are now more safety-conscious and proactive.

For example, work crew members, cleaning out an ore car, complained about sore throats and headaches to the committee. The safety group then sent a sample of the car residue for analysis. Once the tests identified the substance as sulphur, the committee found out the proper procedures to remove this material safely. As a result, the employees were given the proper breathing protection apparatus, and worked under the car where the fumes were less intense, instead of on top.

"The committees and company education efforts have definitely changed everybody's attitudes about safety," adds Jones. "We used to see employees wearing safety glasses and other protective equipment being kidded. Now the peer pressure's on those who work unsafely. That's a very encouraging sign — the forecast is for improved safety in Halifax."

Thunder Bay Un problème... une solution

Les coprésidents du comité sont Steve Canellos, coordonnateur de trains, et Ron Hodges, représentant de service de la Fraternité canadienne des cheminots, employés des transports et autres ouvriers. «Au comité, chaque membre, qu'il s'agisse d'un cadre ou d'un employé, a le même poids. Tous les points de vue sont pris en compte», dit Ken Jones, mécanicien de locomotive représentant la Fraternité des ingénieurs de locomotives.

Cette méthode a apporté plusieurs mesures positives :

- Le retrait de réservoirs de carburant souterrains inutiles de l'ancien bâtiment des Messageries CN à Thunder Bay North. Ce bâtiment est actuellement loué à un tiers qui n'en avait pas besoin. Les réservoirs contenaient encore du carburant et des gaz. Si on les avait laissés se détériorer, ils auraient pu présenter un risque pour la sécurité ou perdre leur contenu et provoquer un accident écologique qui aurait coûté cher à nettoyer.

- Les visites ont permis de découvrir que le quai de char-

gement de ce même bâtiment était dans un tel état de délabrement qu'il compromettrait la sécurité pendant les manœuvres. Il fallait le réparer ou le faire disparaître. Après avoir été informé de la situation par écrit, le nouveau locataire a retiré le quai.

- Au triage Mission, le comité a découvert que les ours noirs présentaient un risque pour la sécurité des employés à une certaine période de l'année. Ils ont réussi à emprunter un piège qui permet de capturer les animaux vivants dans le but de les relâcher dans un endroit éloigné. À ce jour, trois ours ont été pris et remis en liberté. Le comité envisage maintenant d'acheter son propre piège à ours.

«Lors de nos visites, nous prenons directement connaissance des préoccupations du personnel en matière de sécurité. Nous sommes en mesure de constater les problèmes *de visu* et d'entendre ce qu'ont à dire les principaux intéressés. Nous discutons ensuite des cas soulevés pendant nos réunions l'après-midi», dit M. Canellos.

Outre le domaine du CN, le comité visite la propriété des entreprises voisines et celle d'autres grands clients de la Compagnie, ce qui donne lieu à une collaboration étroite en matière de sécurité et contribue à rendre l'exploitation plus sûre pour le CN et le personnel des entreprises clientes.

Le comité de sécurité et de santé de Thunder Bay estime qu'il est préférable de se rendre sur les lieux de travail plutôt que de faire venir à lui les employés. Ses membres se rencontrent à huit heures le matin, le quatrième mercredi de chaque mois, et passent la matinée à visiter l'un des trois grands triages de la région (Thunder Bay North, Neebing ou Mission) à la recherche de lacunes en matière de sécurité. Ils discutent avec les employés au travail et prennent des mesures immédiates si nécessaire.

L'après-midi, ils se réunissent pour décider des mesures qu'il faut prendre pour régler les problèmes de sécurité découverts lors de leur visite.



Le comité de sécurité et de santé de Thunder Bay. De g. à d. : Paul Beazley, Gene Abraham, Jack Sanderson, Ken Jones, Ivan McDonough, Rosemary Marasco, Ron Hodges et Earl Taylor. Steve Canellos était absent au moment de la photo.

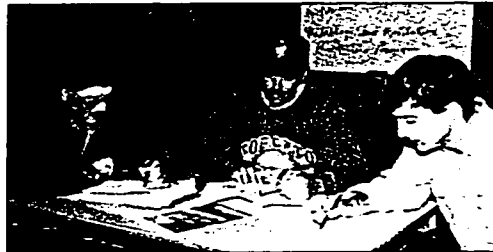
Halifax Il peut bien pleuvoir, grêler ou neiger...

Les trois membres du comité de sécurité et de santé de l'atelier de Fairview font face à des défis uniques à l'atelier du matériel roulant de Halifax. Et d'abord, l'atelier est le seul établissement en plein air de son genre au CN.

«Il peut bien pleuvoir, grêler et neiger le même jour, clame Graham Yeadon, superviseur du matériel et représentant de la direction au comité. Vous savez ce qu'on dit à Halifax : si vous n'aimez pas le temps qu'il fait, attendez un peu, il ne tardera pas à changer.»

En hiver, le comité doit faire face à des problèmes comme l'enlèvement de la neige, l'huile hydraulique gelée et des vérins pneumatiques plus lents ; en été, la chaleur et les rayons ultraviolets prennent la relève. Le wagonnier Dan Jones explique que le comité doit toujours prévoir le temps qu'il fera.

Il arrive aussi que les réunions du comité soient houleuses. S'il faut en croire le wagonnier Mike Fraser, les réunions sont toujours productives malgré les désaccords. Bénévoles sérieux, les membres du comité veillent à ce que leurs collègues de travail rentrent chez eux «tout d'une pièce» à la fin de la journée.



De gauche à droite : Dan Jones, Mike Fraser et Graham Yeadon.

«Comme nous sommes seulement trois membres, nous recherchons constamment des candidats qui, même s'ils ont de bonnes idées à défendre, n'en sont pas moins capables de compromis, note Graham Yeadon. Je ne plaisante pas : il y a un tas de choses à négocier et de compromis à faire dans un comité de sécurité.»

Même si les trois membres du comité ont leurs petits désaccords, ils s'entendent tous pour dire que leur travail donne des résultats. Ils constatent que les employés ont davantage tendance à signaler les problèmes s'ils croient que leurs interventions ne resteront pas vaines et qu'il y

aura des progrès sur le plan de la sécurité. D'après les membres du comité, les employés sont plus conscients qu'avant de la sécurité et prennent des initiatives.

Donnons un exemple. Les membres d'une équipe de travail qui nettoyaient un wagon de minerai s'étaient plaints de maux de tête et de douleurs à la gorge. Le comité de sécurité fit donc analyser un échantillon des résidus qui se trouvaient dans le wagon. L'analyse ayant établi que les résidus contenaient du soufre, le comité a pu trouver la bonne méthode pour enlever cette matière en toute sécurité. On a donné aux employés l'équipement respiratoire nécessaire, et ils ont pu travailler sous le wagon, là où les vapeurs étaient moins intenses.

«La formation des comités et les efforts que la Compagnie a déployés en matière d'éducation ont changé les mentalités en ce qui a trait à la sécurité, ajoute Dan Jones. Les gens avaient l'habitude de se moquer des employés qui portaient des lunettes de sécurité et d'autres vêtements de protection. Aujourd'hui, on tourne en dérision ceux qui ne respectent pas les consignes de sécurité. Voilà qui est très encourageant et qui nous laisse croire que la sécurité est en progression à Halifax.»

APPENDIX IX

Copies of *Rail Lines* / *Écho Rail* Articles

CN

RAIL

VOLUME 10 NUMBER 1 JANUARY 1993



ATLANTIC REGION

LINES

PUBLISHED BY CN PUBLIC AFFAIRS, MONCTON

Disruptions in service

How they impact CN and its customers

ATLANTIC REGION – Re-establishing rail service following a disruption of service is a very large and expensive undertaking. It is costly both in terms of dollar loss and possible negative effect on customer relations. It is also a supreme exercise in coordination of activities. While the heaviest demands are on employees responsible for cleanup and getting the line functional again, almost every other department within CN has an important role to play.

Many things can cause disrupted service, including Acts of God such as washouts, cyclones, hurricanes, snowstorms or animals on the track. Vandals frequently break switch locks or put foreign material on the track, while trespassers wreak havoc with all terrain vehicles and trucks cause damage by crossing the tracks where there is no proper level crossing. Internal factors such as equipment, employee or plant failure are also sometimes the culprit.



While service disruptions place an enormous financial burden on CN and require tremendous coordination among departments to re-establish the flow of traffic, by far the biggest concern is possible customer dissatisfaction with late delivery, damaged or lost goods.

(Photo: Doland LeBlanc)

Determining if there are any injuries, and if so, summoning medical help is the first concern. If the goods being carried present any danger to the environment, that must also be given priority. Once these vital areas are taken care of, the next concern is getting the line functioning again as quickly as possible, particularly if

the disruption affects traffic on a main line.

Both within and outside CN, many people and departments are involved in the procedure followed to re-establish service. The coordination of these efforts is the responsibility of the Chief Rail Traffic Controller. The order of

notification and who is notified depends upon the type and severity of the incident as well as where it takes place. For example, if passenger trains will be affected, VIA Rail is advised. If a crossing is involved, various police agencies, including CN Police, are informed.

Public Affairs is responsible for releasing information to the public through the media, while the Transportation Department coordinates all activities with respect to the disruption, which includes the responsibility for rerouting and handling traffic, the rerailling process and the emergency response. The Engineering

Department is mainly responsible for helping clear and rebuild the track, while the Equipment Department is instrumental in the rerailling of cars and determines whether they should be repaired or replaced.

The Environment Department oversees clean-up of material that presents a hazard to the environment and advises various regulatory bodies as dictated by the incident. General Claims handles any claims for damage that may arise, while the Customer Service Centre notifies customers that their goods are held up. Also advised are the Special Commodities Officer, the Manager of Train Service and the Operation Management Control Office (Control Centre) in Montreal.

With so many people involved, the cost in manpower alone is staggering. With equipment and track repairs and claims for damage, a disruption in rail service can conceivably escalate into the millions. Add to that the potential for losing customers and the need for every CN employee to help prevent disruptions in service can be easily understood.

Editor's note: Over the next several issues, RAIL LINES will be examining the roles of people and departments involved in coping with the aftermath when a disruption of service does happen.

CN

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PUBLIÉ PAR LES AFFAIRES PUBLIQUES, MONCTON



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L'ATLANTIQUE

RAIL

VOL. 10, N° 1 — JANVIER 1993

Les interruptions de service : leur impact sur le CN et ses clients

RÉGION DE L'ATLANTIQUE —

Le rétablissement du service sur une ligne ferroviaire est une opération massive et coûteuse. Le rétablissement du service constitue, au plus haut degré, un exercice de coordination des activités. Presque tous les services du CN y jouent un rôle important, bien que soit surtout mis à contribution le personnel responsable du nettoyage et de la remise en service.

Les interruptions de service peuvent avoir différentes causes. Il peut ainsi se produire des cas de force majeure tels que les affouillements, les cyclones, les ouragans, les tempêtes de neige ou la présence d'animaux sur la voie. Il arrive souvent que des vandales brisent les cadenas des appareils de manœuvre d'alignement ou placent des objets sur la voie, ou encore que des intrus montés sur des véhicules tous terrains ou dans des camions endommagent la voie en la traversant à des endroits où il n'y a pas de passage à niveau. Les interruptions de service peuvent également être imputables à des éléments internes comme le matériel, les membres du personnel ou une panne des installations.

Lorsque se produit un incident, il faut d'abord déterminer s'il y a des personnes blessées et, le cas échéant, obtenir des secours médicaux. Si les marchandises transportées présentent un danger quelconque pour l'environnement, il faut également en faire une priorité. Après avoir réglé ces questions d'importance vitale, il faut voir à rétablir le service sur la ligne aussi vite que



Toute interruption de service est coûteuse non seulement à cause de la perte financière qu'elle entraîne, mais aussi à cause des effets préjudiciables qu'elle peut avoir sur les relations qu'entretient le CN avec ses clients.

possible, surtout si l'interruption touche la circulation sur une ligne principale.

De nombreuses personnes et services, tant au CN qu'à l'extérieur, participent au processus de rétablissement du service. Il incombe au contrôleur en chef de la circulation ferroviaire de coordonner ces efforts. Le type d'incident, son

impact et son importance

s'est produit sont les facteurs qui détermineront qui doit être avisé et dans quel ordre. Si, par exemple, un train voyageurs est retardé, il faudra en informer VIA Rail ; si un passage à niveau est en cause, il faudra informer les différents corps de police, y compris celui du CN.

Les Affaires publiques sont chargées des communications avec les médias en vue de mettre le public

(Photo : Doland LeBlanc)

au courant, tandis que le Transport coordonne les opérations à effectuer en cas d'interruption de service, lesquelles comprennent le réacheminement et le contrôle du trafic. Le processus de remise sur rails et les interventions d'urgence. L'Ingénierie a comme principal rôle de dégager la voie et de la remettre en état, tandis que le Matériel roulant participe à la remise sur rails des wagons et détermine si ceux-ci

doivent être réparés ou remplacés. Le service de l'Environnement supervise les opérations de nettoyage du matériel qui présente un danger pour l'environnement et notifie les organismes réglementaires appropriés. Les Réclamations générales traitent toutes les réclamations afférentes à l'incident et le Centre de services-clients avise les clients que l'acheminement de leur envoi est retardé. L'agent ou l'agente aux Marchandises dangereuses, le coordonnateur ou la coordonnatrice de trains ainsi que le bureau de Gestion de l'exploitation à Montréal doivent également en être informés.

Le grand nombre de personnes qui participent à ces opérations font que, rien qu'en main-d'œuvre, les frais sont extrêmement élevés. Les réparations du matériel et de la voie et les réclamations pour avaries que signifie une interruption de service peuvent facilement atteindre les millions de dollars. Le risque de perdre des clients qui s'ajoute à ce bilan fait qu'il est facile de comprendre que chaque membre du personnel se doit de contribuer à prévenir les interruptions de service.

Nota de la rédaction : Dans les prochains numéros, Écho Rail se penchera sur le rôle de chaque personne et service participant au rétablissement du service après une interruption.

CN

RAIL

VOL. 10 NUM. 2 FEBRUARY - MARCH 1993



ATLANTIC REGION

INNES

PUBLISHED BY CN PUBLIC AFFAIRS, MONCTON

Major restructuring to take place on the Atlantic region

As part of an initiative to improve the railway's competitiveness in a tough transportation marketplace and to remain a viable option for shippers and receivers, CN North America is significantly reducing the size of its workforce and paring the size of its rail network.

Paul Tellier, CN's president and chief executive officer, said that the workforce reductions will cost the company about \$900 million in retirement and separation packages which will be accounted for in the company's 1992 financial statements.

Nationally, some 3,000 administrative and unionized positions will be eliminated in 1993, and the equivalent of an additional 7,000 reductions will be made by the end of 1995.

As a result, by the end of 1995, CN's employment levels in Atlantic Canada will be reduced by approximately 1,500 from the current level of about 3,000.

Some 500 CN employees will be affected throughout the Region in 1993. It is expected that approximately half of that number will come as a result of union discussions relative

to those employees currently on various forms of employment security. The balance will come from the elimination of current positions. These will be achieved through a combination of early retirements, attrition and separation packages.

As Moncton is the regional headquarters for the Atlantic Region where some 60 percent of the employee population is located, about 140 employees will be affected by the cost reduction initiative. Offsetting these reductions somewhat will be jobs created through the consolidation of certain Eastern Canada activities into Moncton. CN recently announced its new consolidated Crew Management Centre which will create some 85 new positions by 1995. Of that number, approximately 50 positions are expected to be in place by the end of 1993.

In addition, the consolidation of certain accounting activities for Eastern Canada to Moncton will create a further 10 positions. CN will be examining other opportunities which may result in additional jobs for the region. Each decision will be based on the outcome of a business case analysis.

The remaining 1,000 positions to be abolished in 1994-95 have not yet been specifically identified. However, it is anticipated that aggressive actions to be taken by the Company to improve productivity and reshape the railway network, as well as rationalize facilities in Atlantic Canada, will be key ingredients in determining where further adjustments can take place.

Says regional vice-president, M.A. Blackwell, "Our goal is clear — here, as elsewhere in Canada, we intend to operate a viable, competitive transportation, distribution service. We are not going out of business in Atlantic Canada — in fact, this is one step in the revitalization of the railway to ensure it will stay in business here.

Most particularly, CN is committed to maintaining rail service for the Ports of Halifax and Saint John and working with our new short line partners. Indeed, we are an integral part of a network committed to maintaining a solid, core railway service for all of Canada.

Intermodal hubs, such as the one in Moncton, as well as the one planned for Halifax, will

play an increasingly important role in not only maintaining our current customer base, but as demonstrated in the past, in growing the business.

Intermodalism will also act as a catalyst in redesigning the basic plant and facilities and will influence changes in rolling stock equipment. At the same time, intense effort is being made to improve our service reliability and speed to meet the increasing demands of the marketplace.

Blackwell indicated that the railway will be spending \$10 million in 1993 and a further \$40 million in capital between 1994-97 for plant renewal projects on the Atlantic Region.

Concluded Blackwell, "We remain committed to becoming the safest railway in North America and to meeting the quality standards being demanded by a growing number of our customers. Safety will never be compromised as we continue to deliver your goods safely, damage free and on-time."

CN

ÉCHO

PUBLIÉ PAR LES AFFAIRES PUBLIQUES, MONCTON



RÉGION DE
L'ATLANTIQUE

RAIL

VOL. 10, N° 2 — FÉVRIER - MARS 1993

Réorganisation de la région de l'Atlantique

MONCTON — Désireux de rétablir la santé financière du Canadien National et d'accroître sa compétitivité des marchandises canadiennes soumises à de fortes pressions sur les marchés internationaux, CN Amérique du Nord réduira substantiellement son effectif et de diminuera la taille de son réseau.

Le pdg du CN, Paul M. Tellier, a déclaré que ces compressions de personnel cotieraient en 1990 M\$ à la Compagnie, notamment en programmes de retraite et de cessation d'emploi. Cette somme figurera aux états financiers de 1992.

Au niveau du réseau, 3 000 postes administratifs et syndiqués seront abolis en 1993 et quelque 7 000 autres au cours des deux prochaines années.

Par conséquent, l'effectif de CN Amérique du Nord au Canada Atlantique sera réduit d'environ 1 500 employés d'ici la fin 1995. La moitié de l'oeuvre actuelle du CN au Canada Atlantique sera confiée à 3 000 employés.

Quelque 500 postes seront abolis dans la région de l'Atlantique en 1993. On s'attend à ce que la moitié des coupures soient négociées avec les syndicats dont les membres bénéficient de programmes de garantie d'emploi. Pour ce qui

est des autres coupures, il faudra éliminer des postes du service actif. Ces abolitions se feront par départs à la retraite anticipée, attrition et programmes de cessation d'emploi.

Puisque le bureau régional de la région de l'Atlantique est situé à Moncton, où près de 60 pour cent des employés travaillent, son vice-président, Marv Blackwell a indiqué que, logiquement, Moncton sera durement frappée, perdant quelque 140 postes d'ici la fin de 1993. Pour compenser cette compression du personnel, de nouveaux postes seront créés à Moncton dans le cadre du regroupement de certaines activités de l'Est du Canada. Le CN a récemment annoncé le regroupement des centres de gestion des équipes en un centre pour l'Est du Canada à Moncton, ce qui créera quelque 85 emplois à Moncton d'ici 1995. On s'attend à ce que quelque 50 employés soient déjà en poste avant la fin de 1993.

De plus, le regroupement de certaines activités de la Comptabilité pour l'Est du Canada créera dix autres postes à Moncton. Le CN considère également d'autres occasions d'affaires qui pourraient signifier d'autres postes pour Moncton. Chaque décision sera prise en fonction des résultats d'une analyse financière du projet en question.

Les quelque 1 000 emplois à abolir au cours des années 1994 et 1995 dans la région de l'Atlantique du CN n'ont pas encore été déterminés. Toutefois, la Compagnie a l'intention de prendre des mesures plutôt dynamiques en vue d'augmenter la productivité, de réduire la taille du réseau et de rationaliser les installations du CN au Canada Atlantique. La Compagnie sera alors mieux en mesure de déterminer les secteurs où il y a lieu de faire des réductions.

«Notre objectif est clair : ici, tout comme ailleurs au Canada, nous avons l'intention d'exploiter un service de transport et de distribution viable et compétitif. Nous ne ferons pas bouillie au Canada Atlantique ; au contraire, nous entamons un processus de revivification du Chemin de fer pour assurer sa survie,» a indiqué Marv Blackwell.

Plus particulièrement, le CN s'engage à maintenir un service ferroviaire pour les ports de Halifax et de Saint-Jean et à travailler avec ses nouveaux partenaires, les propriétaires de lignes secondaires. En fait, nous faisons partie d'un réseau engagé à maintenir un service ferroviaire central fort pour le Canada tout entier.

Les centres intermodaux tels que celui de Moncton, ainsi que celui que l'on prévoit construire à Halifax, joueront un rôle de plus en

plus important non seulement pour garder la clientèle actuelle du CN pendant ses efforts de rationalisation, mais aussi, comme nous l'avons démontré dans le passé, pour augmenter la clientèle du CN.

L'intermodalisme sera également le catalyseur du remaniement de nos installations et influencera sans aucun doute les changements à apporter à notre matériel roulant. De plus, nous avons redoublé nos efforts dans le but d'améliorer la fiabilité et la promptitude de nos services et ce, afin de répondre aux exigences toujours croissantes de la place du marché.

Blackwell a également indiqué que le CN investira pas moins de 10 M\$ en 1993 et 40 M\$ de 1994 à 1997 en revalorisation des installations et du matériel ferroviaires dans la région de l'Atlantique.

Le CN s'est engagé à devenir le chemin de fer le plus sécuritaire en Amérique du Nord et à satisfaire aux normes de qualité exigées par un nombre toujours grandissant de ses clients. «La sécurité ne sera jamais compromise. Nous continuerons à livrer leurs marchandises en toute sécurité, sans avarie et à temps», a souligné Blackwell.



CN: A progressive approach to safety issues

MARITIME DISTRICT – Nothing threatens a company's well being more than something which adversely affects its greatest asset—its human resources. Job-related work injuries certainly fall into this category. In that regard, CN's Engineering Department has seen a rather startling turnaround in the last five years in the reduction of injuries on the job. Between 1988 and 1992 the number of injuries went from close to 22 per million person-hours to just under five injuries per million person-hours, a dramatic decrease by any standards. The effectiveness of internal safety programs is certainly manifested in figures such as this.

But while all this is good, CN decided there was room for improvement and going to an outside rating or opinion was felt to be the way to help move the company forward on safety related matters. Thus the Maritime District got involved with the International Safety Rating system as part of a pilot project to see if this rating system would help us further improve our safety programs, always a vital concern in a high-risk industry such as railroading.

"We welcomed the opportunity to look at our safety programs from an outside perspective," says District Engineer Ian Steeves "not so much

to give us a rating, but more to give us areas where we can initiate improvements and to work toward improving, based on international standards."

In the International Rating system there are five levels, level five being the highest, in each of two rating programs: Standard and Advanced. CN was rated in the Standard category. It is a comprehensive evaluation which identifies activities contributing to safety, health, fire protection, areas that need strengthening and program elements that should be developed. The program audit covers up to 20 areas, CN having been evaluated in 16 of these. Some examples are: management training, accident/incident investigation, personal protective equipment, employee training and personal communications. The Engineering Department was granted the level three rating in the Standard program of the International Safety Rating system. One element, planned inspections, reduced our rating from level four to level three.

In carrying out the audit, five individuals went across the territory interviewing supervisory personnel, plus unionized staff, in the field. In a report on their findings, the group commended the Maritime District on its hiring and



Shown with the International Safety Rating Award presented to CN's Engineering Department are, left to right, Safety Officer Daryl Underhill; Engineering Officer Allen Marshall and District Engineer Ian Steeves. The award is given for achievement in the International Safety Rating System's Standard Program.

(Photo: Crandall Studio)

placement policies and resources as well as for holding group meetings which included health and safety committees. Areas for improvement were pointed out, including the suggestions that

health and safety committees could be involved to a greater extent in administering safety programs and that planned safety inspections by engineering staff could be carried out to supplement safety and loss control inspections.

rather than after an infraction occurs."

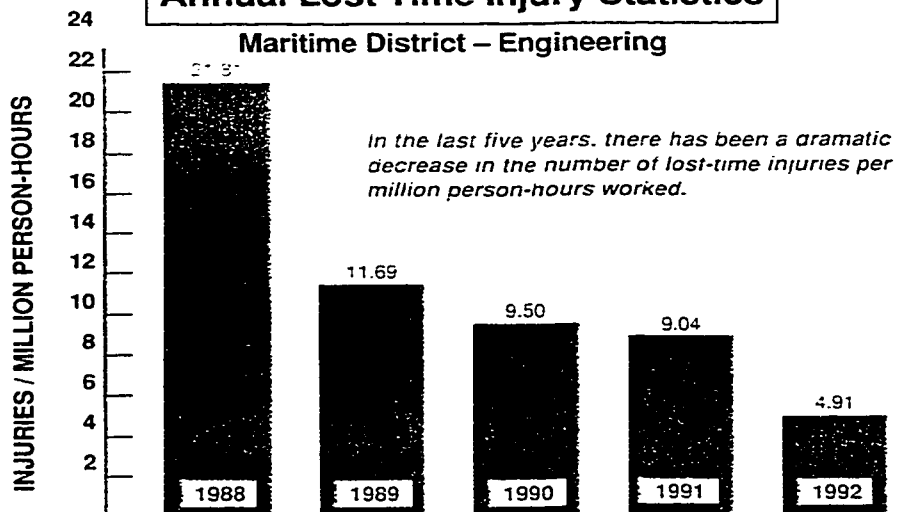
"CN is one of the few companies across North America to take this progressive approach to being rated on safety," says Steeves. "However, despite having made some moves in that direction, it is going to be tougher in future to keep improving our safety performance because of the non-traditional areas left that need improvement. They will need a fresh approach, a new perspective. In general, we are at the point of looking at the fine tuning of our safety programs."

If, out of all this commitment to further improve safety standards and records, things are seen like huge reductions in work-related injuries and the presentation of awards such as that just received by the Engineering Department, then it follows that CN will be perceived by its customers as a safe way to transport commodities. That alone would be a very worthwhile achievement.

"There are a lot of things we take for granted in our safety programs. The audit was very specific in assigning responsibility. It was felt that we should be assigning safety responsibilities in job descriptions," says Steeves. "It was also suggested that auditing be carried out on an ongoing basis, something we haven't been doing. The Safety Training Observation Program (STOP) was designed to address this but we never had a regular schedule of these audits of safety performance," Steeves says further that with the many regulatory standards, "we have tended to deal with meeting regulations by exception. It has been suggested that a list of regulations be drafted and where they apply and to do a survey to ensure they are being complied with. This approach is being proactive in dealing with regulations

Annual Lost Time Injury Statistics

Maritime District – Engineering





Fiche sécurité : le CN adopte une approche progressive

DISTRICT DES MARITIMES – Rien ne menace davantage une compagnie que ce qui nuit à son plus grand atout – ses ressources humaines. Les blessures au travail tombent certes dans cette catégorie. Sous ce rapport, le service de l'Ingénierie du CN a connu un beau revirement au cours des cinq dernières années, réduisant de beaucoup le nombre de blessures subies au travail. Entre 1988 et 1992, il est passé de près de 22 par million d'heures-personnes travaillées à juste au-dessous de cinq. C'est une décroissance spectaculaire, quelle que soit votre norme ! Ces chiffres démontrent certainement l'efficacité des programmes de sécurité internes.

Malgré le caractère positif de cette réalisation, le CN a décidé qu'il pouvait encore améliorer sa fiche. Il estimait aussi que c'était en se prévalant d'un système d'évaluation ou d'une opinion de l'extérieur qu'il pourrait progresser davantage dans ce domaine. Ainsi, le district des Maritimes a instauré un projet pilote se servant du système international d'évaluation en matière de sécurité pour voir s'il pouvait ainsi améliorer ses programmes de sécurité, qui constituent toujours une préoccupation importante dans une industrie à risques élevés comme celle du fer.

«Nous avons accepté à bras ouverts l'occasion d'examiner nos programmes de sécurité d'une nouvelle perspective», affirme l'ingénieur de district Ian Steeves, pas particulière-

ment dans le but d'obtenir une cote, mais plutôt dans le but d'identifier les secteurs où nous pouvions apporter des améliorations selon des normes internationales.»

Le système international d'évaluation compte cinq cotes, la cote cinq étant la plus élevée, dans chacun de ses deux programmes d'évaluation, le programme ordinaire et le programme avancé. Le CN a été coté dans la catégorie ordinaire. Il s'agit d'une évaluation globale qui identifie les activités contribuant à la sécurité, à la santé et à la protection contre l'incendie, ainsi que les secteurs à améliorer et les éléments à développer. La vérification couvre jusqu'à 20 secteurs. Le CN a été évalué dans 16 secteurs, dont en voici quelques-uns : formation des cadres, enquête sur les accidents et les incidents, matériel de protection pour les particuliers, formation des employés et communications interpersonnelles. Le service de l'Ingénierie a obtenu la cote trois dans le programme international ordinaire d'évaluation de la sécurité. Un élément, soit le manque d'inspections planifiées, nous a fait perdre la cote quatre de justesse.

Cinq vérificateurs ont parcouru notre territoire, interviewant superviseurs et syndiqués. Dans son rapport, le groupe a félicité le district des Maritimes pour ses politiques d'embauche et ses ressources ainsi que pour la tenue de réunions de groupe, dont celles des comités de sécurité et



Le service de l'Ingénierie du CN a mérité un prix pour avoir obtenu la cote supérieure de trois selon le système international d'évaluation, catégorie ordinaire. On aperçoit, de gauche à droite, l'agent Sécurité Daryl Underhill, l'agent Ingénierie Allen Marshall et l'ingénieur de district Ian Steeves.

(Photo : Crandall Studio)

de santé au travail. On a souligné les forces et les faiblesses de notre système, précisant les secteurs où il y avait place à amélioration. On a aussi mentionné que les comités de sécurité

et de santé au travail devraient participer plus activement à la gestion des programmes de sécurité et que le personnel de l'Ingénierie devrait effectuer des inspections de sécurité planifiées pour compléter les inspections faites par le personnel de la Sécurité et du contrôle des pertes.

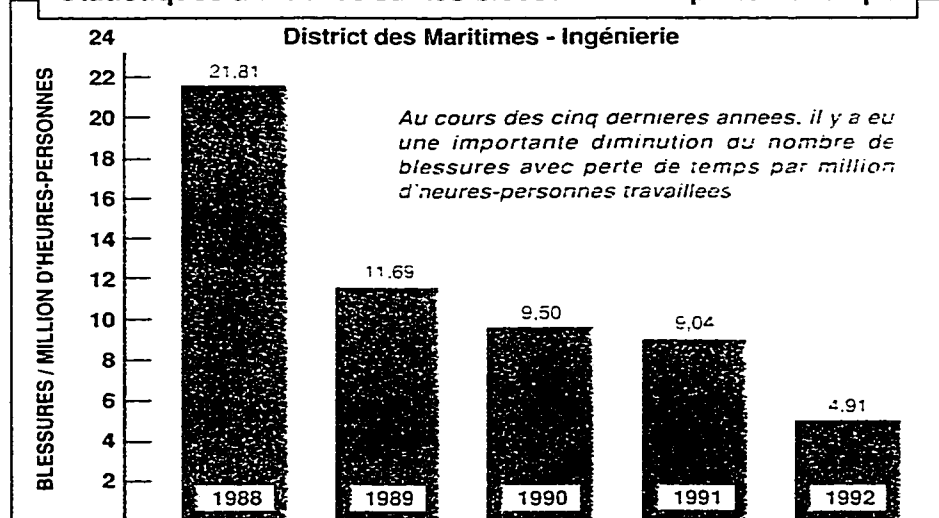
«Nous tenons beaucoup de choses pour acquies au chapitre des programmes de sécurité. Les vérificateurs ont été très précis dans la répartition de la responsabilité ; ils estiment que les descriptions de poste devraient délimiter la responsabilité de chacun», affirme Steeves. On a aussi suggéré que des vérifications internes soient effectuées régulièrement, ce que nous ne faisons pas. Le Programme de sécurité au travail par l'observation préventive a été conçu dans cette optique, mais nous n'avons jamais dressé d'horaire fixe pour la vérification de notre rendement en matière de sécurité. Steeves ajoute : «Compte tenu des nombreuses normes à respecter, nous avons souvent opté pour la vérification des règles transgressées. On nous a proposé de dresser une liste des règles à appliquer et de procéder à des vérifications internes pour s'assurer qu'elles sont bel et bien observées. Il s'agit d'une approche

positive à prendre face aux règles et non seulement d'une réaction face aux infractions.

«Le CN est l'une des seules compagnies nord-américaines à adopter cette approche progressive face à la sécurité», dit Steeves. Cependant, malgré les progrès que nous avons faits jusqu'à maintenant, il sera plus difficile pour nous d'améliorer notre fiche sécurité à l'avenir en raison des secteurs non traditionnels à améliorer. En général, nous devons innover. Nous sommes à raffiner nos programmes de sécurité au plus haut point.»

Si l'engagement du CN à améliorer davantage ses normes de sécurité et sa fiche sécurité se traduit par d'importantes réductions dans le nombre et la gravité des blessures au travail et par la présentation de prix tels que celui que l'Ingénierie vient de recevoir, alors le CN sera certes perçu par ses clients comme un transporteur sûr, réalisation qui, à elle seule, vaut bien des efforts.

Statistiques annuelles sur les blessures avec perte de temps



CN

RAIL

VOLUME 10 NUMBER 5 JUNE 1993



ATLANTIC REGION

LINES

PUBLISHED BY CN PUBLIC AFFAIRS, MONCTON

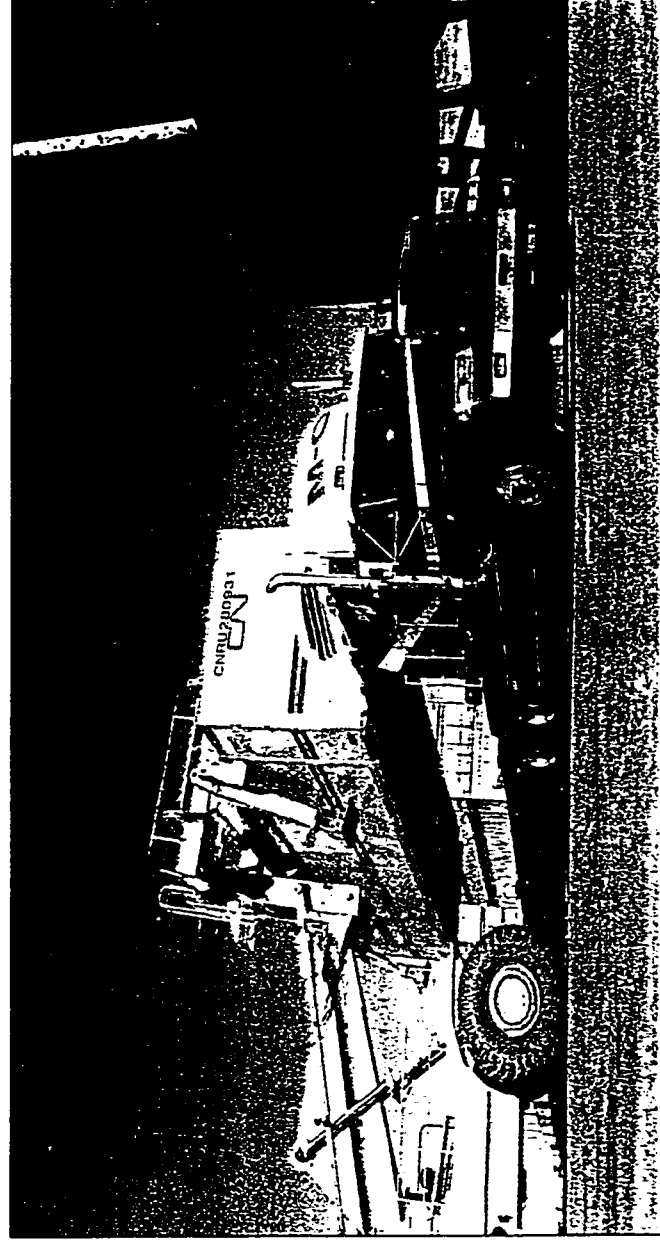
CN-Maritime Ontario: working together to serve customers better

On May 3, CN North American and Maritime Ontario Freight Lines Limited announced a long-term partnership agreement to haul traffic between Central Canada and the Maritimes. Maritime-Ontario, a well-established Toronto-based LTL (less than truckload) carrier, presently handles most of its 21,000 loads per year over the highway. Under terms of the agreement, a significant portion of their Maritime business will now move long-haul by rail, with local pick-up and delivery made by truck.

"We're very excited about this partnership because it involves a Canadian carrier, enhances our presence in the Maritimes, and gives us another toe-hold in the LTL market," said CN's president and chief executive officer Paul Tellier when the agreement was announced.

At the same time, Doug Munro, chief executive officer of Maritime-Ontario, said "given the excellent service of CN Laser trains, transit time will be equivalent to over-the-road transport. For society, there are spin-off benefits such as less highway congestion and pollution."

CN Intermodal has been hauling truck trailers over long distances for the Canadian trucking industry for some time, generally to handle peak volumes. The agreement with Maritime-Ontario will give



Working together to serve customers better, Maritime Ontario driver Russell Gilroy at Moncton's Gordon Yard upon arrival of CN Laser Train. (Photo: Crandall Studio)

Intermodal an opportunity to handle core LTL business that previously moved over the highway. The traffic will be moved in CN Intermodal's 48ft containers, double stacked on nightly Laser trains in the Toronto-Moncton-Moncton-Halifax corridor.

"There's no doubt the announcement of a new intermodal terminal

for Halifax was a factor in securing this business," said Atlantic Region Market Manager (consumer goods, automotive, grain) Dan LeBlanc. "We'll gain a large volume of traffic on an underutilized line, and Maritime-Ontario will benefit from the rail efficiencies they've recognized CN can provide. Our operations people have proven the reliability of the Laser train service. It

is seen as fast, cost effective, and reliable. That has enabled CN North American to successfully negotiate the Maritime-Ontario agreement, along with a number of other joint ventures with highway carriers."

Following on the heels of an agreement with J.B. Hunt, a major U.S.-based trucking firm, the Maritime-

Ontario agreement is another indication of the growing cooperation between trains and trucks to provide reliable low-cost, transportation services over long distances.

"There's been a definite shift in business practices in the 1990's," LeBlanc added. "The tough times we've experienced in recent years have prompted the major players in the transportation industry to take a close look at the way they were operating in the late '80's. We are all looking at ways in which we can change - to serve our customers better and improve the efficiency of our operations."

This is resulting in companies once seen as competitors meeting at the negotiating table to carve out "win-win" agreements. "Sure, it offers trucking a lower-cost line-haul option, but forming trucking alliances puts business in CN's pockets," said Intermodal Manager Brian Higgerty. "Simply put, it makes good business sense to align ourselves with trucking partners whom we can do business with."

"The transportation industry is now moving in a direction where each mode sees the value of the other in the overall transportation mix," concluded Higgerty. "The tough times are by no means over yet, but we are certainly headed in a positive direction."

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PUBLIÉ PAR LES AFFAIRES PUBLIQUES, MONCTON



RÉGION DE
L'ATLANTIQUE

RAIL

VOL. 10 N° 5 - JUIN 1993

Le CN et Maritime-Ontario concluent une alliance à long terme

Maritime-Ontario Freight Lines Limited et CN Amérique du Nord ont annoncé, le 3 mai, la conclusion d'une alliance à long terme concernant le transport de marchandises entre le centre du pays et les Maritimes.

Maritime-Ontario, un transporteur d'envois de détail bien connu de la région torontoise, acheminait actuellement l'essentiel de son trafic par la route. Le nouvel accord lui permettra désormais de faire emprunter la voie ferrée à la plupart de ses expéditions à destination ou en provenance des Maritimes, les ramassages et les livraisons étant effectués localement par camions.

Comme l'expliquait, lors de l'annonce de l'accord, Paul Tellier, président-directeur général du CN, « nous avons toutes les raisons de nous réjouir de ce partenariat, parce qu'il met en jeu un transporteur canadien, accroît notre présence dans les Maritimes et nous donne une prise supplémentaire sur le marché des envois de détail ».

Au même moment, Doug Munro, président-directeur général de Maritime-Ontario, déclarait : « Les temps d'acheminement seront les mêmes que par la route, en raison de l'excellent service qu'offrent les trains Laser du CN. De plus, la société en général y gagne puisque ce accord se traduira par un allègement de la circulation routière et une réduction de la pollution. »

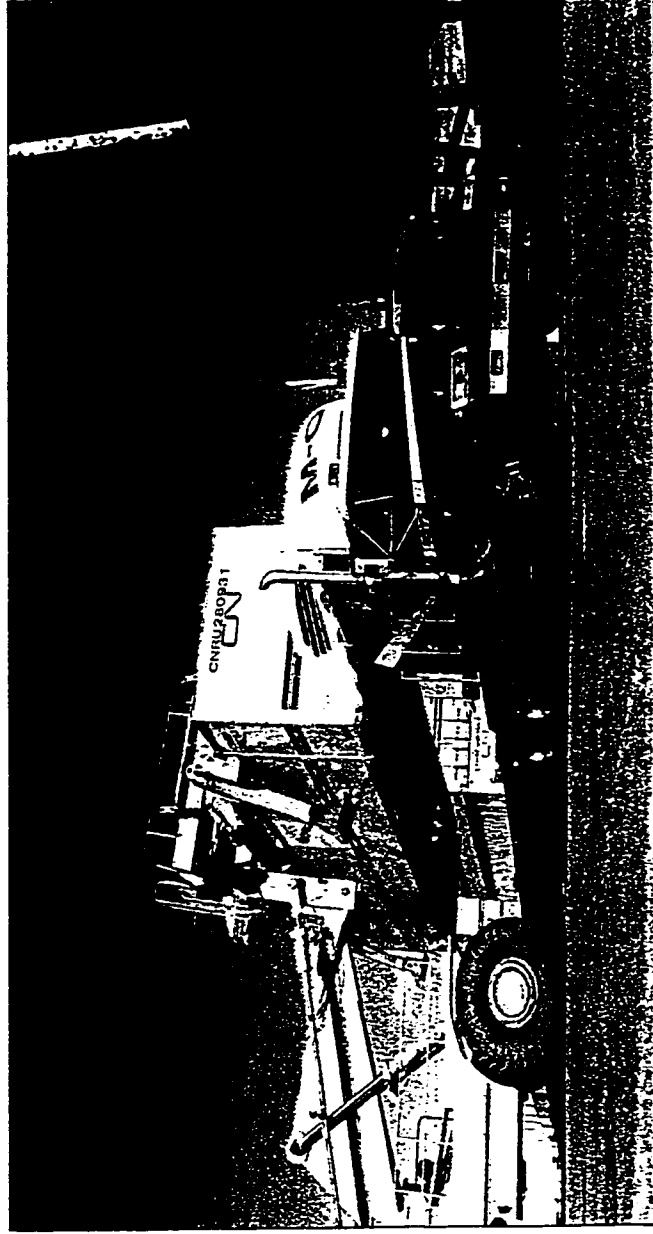
Ce n'est pas la première fois qu'un transporteur routier confie ses semi-remorques au CN pour leur faire franchir de grandes distances, notamment en saison de pointe. L'accord CN-Maritime-Ontario fait passer dans le secteur intermodal le gros des envois

de détail qui jusque là s'effectuait exclusivement par route. Le trafic sera acheminé dans les conteneurs intermodaux de 48 pieds du CN, chargés sur deux niveaux dans les trains Laser qui, chaque nuit, font la navette dans le corridor Toronto-Montréal-Moncton-Halifax.

Comme l'explique Dan LeBlanc, directeur de marché pour la région de l'Atlantique, « il ne fait aucun doute que

l'annonce d'un nouveau terminal intermodal à Halifax a été un facteur déterminant dans la conquête de ce marché. Nous augmenterons de beaucoup le volume de trafic acheminé sur nos voies sous-utilisées, et Maritime-Ontario tirera avantage de l'efficacité du rail, que lui a déjà démontrée le CN ».

« Le personnel de l'Exploitation a bel et bien prouvé la fiabilité des trains Laser. Perçus comme étant rapides, efficaces



Travaillant de concert avec le CN pour mieux servir la clientèle, voici le conducteur de Maritime-Ontario Russell Gilroy au tirage Gordon de Moncton à l'arrivée du train Laser CN.

(Photo : Comdall Studio)

et fiables, les trains Laser ont permis à CN Amérique du Nord de conclure l'accord avec Maritime-Ontario, de même qu'un certain nombre d'autres alliances avec des transporteurs routiers», précise M. LeBlanc.

Cette alliance, qui vient dans la foulée de l'entente entre le CN et J.B. Hunt, est une indication de plus de la coopération qui est en train de s'établir entre les sociétés ferroviaires et routières

pour la fourniture de transports fiables et meilleur marché sur les longues distances.

« Nous assistons à une modification des pratiques commerciales depuis le début des années 1990. Les difficultés que nous avons connues au cours des dernières années ont amené les principales entreprises du secteur des transports à examiner leur mode d'exploitation de la fin des années 1980. Nous cherchons des façons de mieux servir la clientèle et d'améliorer l'efficacité de l'exploitation », ajoute M. LeBlanc.

Il en résulte que les entreprises n'ont guère perçues comme des concurrentes en arrivant à des ententes qui sont profitables à chacune des parties. Comme l'indique Brian Higerty, directeur de l'intermodal, « il est évident que les entreprises de camionnage bénéficient ainsi de prix de transport de ligne réduits, mais ces alliances se traduisent également par un accroissement des recettes du CN. Autrement dit, il est rentable du point de vue commercial de s'associer avec les entreprises de camionnage en lesquelles nous pouvons avoir confiance et avec lesquelles nous pouvons faire des affaires ».

« Le secteur des transports évolue de telle façon que les entreprises ont maintenant recours à un éventail de modes de transport, ce qui leur permet de tirer parti des avantages de chaque mode. La période difficile que nous traversons est loin d'être terminée, mais nous sommes en train de nous positionner de manière à en sortir », conclut M. Higerty.

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VOLUME 10 NUMBER 6 JULY - AUGUST 1993



ATLANTIC REGION

LINES

PUBLISHED BY CN PUBLIC AFFAIRS, MONCTON

CN's Maritime District earns prestigious System Safety Awards

President and Chief Executive Officer Paul Tellier was at the Gordon Yard Car Shop in Moncton recently to present two prestigious CN System Safety Awards to employees of the Maritime District. This is a first for Atlantic Canada in the four-year existence of the awards, and Tellier congratulated the group for an excellent achievement.

One award was the System Yard Safety Plaque. It includes a certificate for \$15,000 for having the lowest yard/spur/siding accident ratio, in recognition of the District having the lowest accident rate across the entire system. The second award was a System Safety Plaque, along with a certificate for \$10,000, for having the third lowest injury index in the system for 1992. Injury index is a calculation based on the frequency and severity of injuries.

The award money is to go to projects concerned with the safety and health of employees. Just what those projects will be has not yet been determined. District Safety and Loss Control Officer Bill Hanson says he is "currently contacting each Health and Safety Committee for feedback and we should know within the next couple of months just where the money will be spent."



Employees are shown with CN Safety Award plaques presented to the Maritime District recently by President and Chief Executive Officer Paul Tellier. Pictured, left to right, Co-Chairman, Health & Safety Committee, Saint John, Mike McMackin; Co-Chairman, Health & Safety Committee, Transportation, Moncton, Lorne Chesser; Safety Coordinator, Motive Power, Moncton, Doug MacFadyen; President and CEO Tellier; Co-Chairman, Health & Safety Committee, Motive Power, Moncton, John LeBlanc; representing the Health & Safety Committee, Sydney, Jim MacIsaac.

"These awards are significant," says Hanson. "In the last five years we've made a marked improvement in our safety record due to the involvement of our employees, the work of Health and Safety Committees, the commitment to safety as the way we do business, and now, with awards like these, it is certainly showing up in the work-place. This year we had the third lowest injury index and we look forward to improving that substantially next time around. Our goal is to be the safest railroad in North America."

Tellier chatted with employees following his presentation and encouraged them to keep up the good work.

(Photo: Crandall Studio)

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Prix de sécurité : le district des Maritimes gagne 25 000 \$

Le pdg Paul M.Tellier s'est rendu à l'atelier du matériel remorqué du triage Gordon, à Moncton, pour remettre deux prestigieux Prix de sécurité du réseau CN. Il s'agit d'une première pour la région de l'Atlantique depuis la création de ce prix, il y a quatre ans, et M. Tellier a félicité le groupe pour son excellent travail.

L'un des prix était la plaque *Sécurité réseau en manoeuvre*, laquelle donne droit à un chèque de 15 000 \$ pour le plus faible taux d'accidents dans les tringles et les embranchements. Ce prix est accordé au district ayant obtenu le taux d'accidents de trains le plus faible dans l'ensemble du réseau. Le deuxième prix, la plaque *Sécurité réseau*, assorti d'une récompense de 10 000 \$, a été accordé au district venant au troisième rang quant à l'indice d'accidents avec blessures en 1992. Ce prix tient compte du nombre de jours perdus en raison des blessures au cours de l'année.

Ces sommes seront consacrées à la réalisation de projets ayant trait à la sécurité et à la santé du personnel. La nature de ces projets n'a pas encore été établie. Bill Hanson, agent Sécurité et contrôle des pertes pour le district, indique qu'il communique avec les comités de sécurité et de santé pour obtenir leurs commentaires, et nous devrions

savoir prochainement comment ces sommes seront dépensées.

«Ces prix sont importants. Au cours des cinq dernières années, nous avons beaucoup amélioré notre rendement en matière de sécurité grâce à la participation des comités de sécurité et de santé et à l'engagement pris par la haute direction. Avec des prix comme ceux-ci, on peut constater les résultats obtenus au travail. L'an prochain, nous comptons bien faire mieux qu'une troisième place pour ce qui est de l'indice d'accidents avec blessures», nous confie Hanson.

M. Tellier ne doute aucunement des capacités de la région de l'Atlantique. Il a indiqué qu'il espérait bien revenir l'an prochain présenter un autre Prix de sécurité. Il a d'ailleurs encouragé le personnel à poursuivre son bon travail.



Le président-directeur général Paul Tellier a présenté deux Prix de sécurité aux employés du district des Maritimes, récemment. De gauche à droite, on aperçoit le coprésident du comité de sécurité et de santé de Saint-Jean, Mike McMackin, le coprésident du comité de sécurité et de santé du Transport, de Moncton, Lorne Chesser, le coordonnateur Sécurité Traction, de Moncton, Doug MacPayden, le pdg Paul M.Tellier, le coprésident du comité de santé et sécurité de la Traction, de Moncton, John LeBlanc, et Jim MacIsaac, représentant du comité de sécurité et de santé de Sydney.

(Photo : Crandall Studio)

Crew Calling Centre in Moncton: State of the Art geared to Customer Service

The focus of Moncton's new Crew Management Centre, projected to move to new quarters during the month of November, is to cater to a different sort of customer—the internal customer. According to Director Crew Management, Eastern Canada, Morris Fisher, "what we really want to do is provide customer service for the people we are serving, from the company officer to the operating crews and any other functions we deal with. Those people are our customers."

Currently there are 22 people working in Moncton in crew management. When the final consolidation has taken place by late 1994, that number will have grown to 120. The centre in Moncton will handle all of Eastern Canada (east from Armstrong/Thunder Bay, Ontario). Montreal will be consolidated into the Moncton office in early 1994 and Toronto, late in 1994.

Only one year ago the whole thing was in the planning stage. A core group of CN people, working with PS Technology of Denver, Colorado, developed the Crew Assignment and Timekeeping System (CATS). Fisher says "with this computer-based system, certain information, such as train profiles and decision tables, along with other pertinent data, is entered into the computer system so that it can make decisions that enables it to select the crew that goes on a train. With the old system, the crew dispatcher went through a list of manual calling procedures from which he would select a crew. If a spare crew was needed, he would go through a spare board list to look for someone; now this is done automatically.



Pictured in front of some of the equipment to be used in the new Crew Management Centre in Moncton are several of those who have been involved in the implementation of the Centre. Left to right are: Project Officer Randy Helmle, Winnipeg; Administration Officer Brian Russell; Labour & Productivity Cost Officer Claude Povencher of Montreal; Instructor Paul O'Connor, Montreal; Project Officers Frank Macapagal and Denis Fournier of Toronto; Director Crew Management, Eastern Canada Morris Fisher; and Operations Officer Pat Drew of Montreal. Missing when photo was taken: System Manager, CATS Project A. L. Randall, Project Officer Denis Parent and Project Owner Bill Day-Luce, all of Montreal; Manager Administration & Payroll Dan Huston; Project Officers Jim Harmata, Mary Gail Lunde and George Sabourin, all of Edmonton; and Project Officer Brian Hutchinson of Toronto.

(Photo: Crandall Studio)

This technological wizardry has other benefits too. The system will help with crew management and yard operations. Operating officers

will be able to monitor costs on a daily basis. Crew members will be able to report their off-duty time and other pertinent data through electronic devices located in "booking-in" rooms. This information will enable employees to be paid automatically.

Employees will also see other benefits from the new computer system, says Fisher. "They need never be short-paid again. They will have the ability to check what they are going to be paid on their next payday. If there are any discrepancies, an

employee can call timekeeping and have them corrected. Problems with things such as time returns, which depend on the mail and are therefore subject to being lost or delayed, will be a thing of the past."

What about the technology that provides all these great developments? "The computer system is a main frame system," says Fisher. "The main frame is based in Montreal, with a back-up in Winnipeg. If something happens with the system in Montreal, we'll automatically access the computer

system in Winnipeg. We'll also use tools such as one called 'Train Planning System' (TPS) that will assist in our lineups for trains so we'll be able to provide up-to-date information to employees that will help them when planning around train schedules. NB Tel's telephone system with Automatic Call Distribution, will enable us to drastically improve the speed with which we answer our phones. We will also use interactive voice, called 'crew talk,' which means people can call and find out when they may be going to work and what their position is on the board."

August 27 marked a big milestone with the implementation of the Crew Assignment and Timekeeping System (CATS). Since that date, road and yard crews have been called with CATS. Yard Service employees are also now being paid through CATS. While Road service employees are still on the old system of putting in a time return, the projected date for switching their payroll is December, 1993. At that time everything—payroll and crew calling—for both road and yard, will be totally on CATS.

"From the start of the project, we have worked with the unions—both within and outside the centre," emphasizes Fisher. "We started a process mapping, and we have representatives of all the unions involved: the CBRT, the UTU and the BLE. All of us, as members of the process mapping team, have been involved in the entire procedure, and during that time we've worked closely together to come up with the best possible process. We have made presentations to company and union officers regarding implementation of the system and what benefits the system would provide."

"Our goal," says Fisher "is customer service and to provide the right crew at the right time on the right train at the lowest possible cost. We want to do our part in achieving 95% on-time train performance or better."

"What we really want to do is provide customer service for the people we are serving, from the company officer to the operating crews and any other functions we deal with. Those people are our customers."

Morris Fisher
Director Crew Management,
Eastern Canada



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VOL. 10 N° 8 - OCTOBRE 1993

Le Centre de gestion des équipes à Moncton : des plus modernes pour mieux servir les clients

Le Centre de gestion des équipes de Moncton qui doit emménager dans de nouveaux locaux en novembre sert des clients bien particuliers, soit les divers services du CN et les cheminots eux-mêmes. Le directeur Gestion des équipes (Est du Canada) Morris Fisher affirme : «Ce que nous voulons faire au fond, c'est offrir des services de qualité aux gens que nous servons : des dirigeants de la compagnie aux roulants, en passant par tous les services avec lesquels nous traitons. Ces gens forment notre clientèle.»

Actuellement, 22 personnes travaillent dans la gestion des équipes à Moncton. Après la dernière consolidation des équipes à la fin 1994, ce chiffre grimpera à 120. Le centre de Moncton s'occupera de tout l'Est canadien, soit de toutes les installations à l'est d'Armstrong/Thunder Bay (Ontario). Montréal sera desservi par le bureau de Moncton au début de 1994 et Toronto, à la fin 1994.

Il y a un an à peine, nous en étions encore à l'étape de la planification. Un groupe du CN a travaillé en étroite collaboration avec PS Technology, de Denver (Colorado), pour concevoir le système affectation des équipes et pointage (CATS). Fisher affirme : «Ce système informatisé permet l'entrée de certaines données, telles que les profils des trains et les tables de décision, ainsi que d'autres informations pertinentes qui permettront au système de choisir l'équipe d'un train particulier. Avec l'ancien système, le répartiteur des équipes suivait une foule de procédures manuelles pour en arriver à choisir une équipe. S'il avait besoin d'une équipe de remplacement, il passait le tableau de remplacement en revue. Maintenant tout se fait automatiquement.»

Cette merveille de la technologie a aussi d'autres avantages. Le système facilitera la gestion des équipes ainsi que les manœuvres. Les dirigeants pourront vérifier les coûts sur une base quotidienne. Les membres des équipes pourront inscrire leurs heures de fin de service et les



On aperçoit sur la photo, en avant de certains équipements qui serviront au nouveau Centre de gestion des équipes à Moncton, plusieurs personnes qui ont joué un rôle clé dans la mise sur pied de ce nouveau centre. De gauche à droite, l'agent de projet Randy Helmle, Winnipeg, l'agent administratif Brian Russell, l'agent Prix de revient - Main-d'œuvre et productivité Claude Provencher, de Montréal, l'instructeur Paul O'Connor, de Montréal, les agents de projet Frank Macapagal, de Toronto, et Denis Fournier, de Moncton, le directeur Gestion des équipes (Est du Canada) Morris Fisher, et l'agent Exploitation Pat Drew, de Montréal. Étaient absents au moment de la prise de la photo le directeur CATS Projet A (réseau) L. Randall, l'agent de projet Denis Parent et le directeur du projet Bill Day-Luce, tous de Montréal, le directeur Administration et Feuille de paie Dan Huston, les agents de projet Jim Harmata, Mary Gail Lunde et George Sabourin, tous d'Edmonton, et l'agent de projet Brian Hutchinson, de Toronto.

(Photo : Crandall Studio)

autres données pertinentes par l'entremise de machines électroniques mises à leur disposition dans les «salles d'inscription». L'entrée de ces données permettra le paiement automatique des employés.

Ce système informatisé procurera aux employés d'autres avantages, dit Fisher. «Les employés pourront s'assurer de ne plus jamais être payés en moins. En tout temps, ils

pourront vérifier les données de leur prochain chèque de paie. S'il y a des écarts, ils n'auront qu'à communiquer avec les pointeurs pour les faire corriger. Les problèmes qu'occasionnait la perte ou le retard de fiches de temps qui nous arrivaient par la poste seront chose du passé.»

Quelle technologie peut nous offrir tous ces avantages? Fisher explique : «Il y a une unité centrale à Montréal

avec un ordinateur de secours à Winnipeg. Si l'unité centrale tombe en panne, nous aurons automatiquement accès à l'ordinateur qui se trouve à Winnipeg. Nous employerons aussi un outil appelé «système de planification des trains» (TPS) qui nous aidera dans la composition des trains. Nous pourrions ainsi fournir des données à jour aux employés, ce qui les aidera à planifier leurs activités autour des horaires

des trains. Le système téléphonique de NBTEL dit distribution d'appels automatique nous permettra d'augmenter de façon phénoménale la vitesse avec laquelle nous répondons aux appels. Nous nous servirons aussi d'un synthétiseur de parole appelé «crew talk», ce qui signifie que les gens pourront appeler pour savoir quand ils doivent se présenter au travail et quelle est leur position au tableau.»

La mise en œuvre du système affectation des équipes et pointage (CATS), le 27 août dernier, a constitué un événement marquant pour le CN. Depuis cette date, les roulants et les employés de triage sont appelés au travail par l'entremise de CATS. Quoique les roulants doivent encore remplir leurs fiches de temps à l'ancienne, ils devraient être intégrés au nouveau système de la feuille de paie en décembre 1993. À ce moment-là, tout, soit la feuille de paie et l'appel des équipes, se fera par l'entremise du système CATS et pour les roulants et pour l'équipe du triage.

«Dès le lancement du projet, nous avons collaboré avec tous les syndicats, ceux qui sont représentés au Centre et ceux qui ne le sont pas», souligne Fisher. «Nous avons commencé à planifier les changements avec la participation de représentants de divers syndicats (FCCET, TUT, FIL). Nous avons tous participé étroitement à la planification de ce processus en vue d'arriver à un produit perfectionné. Nous avons fait des présentations aux dirigeants de la compagnie et aux dirigeants syndicaux sur la mise en œuvre du système et ses avantages.»

«Notre but, de dire Fisher, est de fournir un service de qualité et de désigner la bonne équipe au bon moment pour le bon train et ce, au plus bas prix possible. Nous voulons faire notre part pour que la performance à temps des trains atteigne la cible fixée de 95 pour cent ou mieux.»



A new beginning for the Truro-Sydney line

"It's a rebirth for the line, but CN is still there."

Claude Poirier, Manager Research Services

The sale of the Truro-Sydney line to RailTex may appear on the surface of things to be a loss for CN. After all, people say we're losing a significant portion of our network. But the sale of this line is an excellent example of where an impression can be very deceiving.

The line was offered for sale in September, 1991 and was not without controversy. Among the hurdles to be faced was a Senate inquiry, Nova Scotia provincial government opposition, and a six-month review by the National Transportation Agency. But finally, as of October 1, 1993, the new owner, RailTex, took over and the Cape Breton and Central Nova Scotia Railway (CB & CNSR), as the company operating the Truro-Sydney line is known, began operations.

The Truro-Sydney line is the 22nd short line to be established in North America by RailTex. It is only the third to be established in Canada and the first in the east. One of the two other Canadian short lines is in Ontario and is also owned by RailTex. It runs between Goderich and Exeter.

"A short line, by having a lower cost base, a different way of doing things and a different focus on the marketplace, helps to retain traffic on the rails," says Manager Research Services Claude Poirier. "As traffic to and from the Truro-Sydney line is interchanged with CN at Truro, it will result in more traffic on CN's main line, so it really is beneficial to us."

How Cape Breton and Central Nova Scotia Railway Operates

"Most Cape Breton and Central Nova Scotia Railway employees are former CN employees," explains Poirier. "In fact, many of them were working on the Truro-Sydney line for CN and are basically providing the same service."



Paperwork! Surrounding the table are the vast amounts of paper involved in the transfer of the Truro-Sydney line from CN to the Cape Breton and Nova Scotia Railway. Left to right are CB & CNSR lawyer Harry Munro; CB & CNSR General Manager, Mark Westerfield; CN Regional Counsel Myer Rabin; Manager Research Services Claude Poirier; and John Schiller, a lawyer acting on CN's behalf.

(Photo : Dave Macintyre)

The new operators have a profit-sharing scheme which provides an incentive to employees, as they will share in the profits. With each additional car the Cape Breton and Central Nova Scotia Railway attracts, the greater will be individual profit and the greater the incentive to attract that business.

The General Manager of CB & CNSR, Mark Westerfield, is from the United States and has been in charge of several short lines in the US and Canada. He's been here since August and has been in charge of hiring staff and setting up the operation. He was also the start-up manager of the Goderich-Exeter line in Ontario, also acquired from CN.

Customers on the line

As for the customers affected by the changeover, they understand CN's reasoning for the sale. "It was a way of shoring up a service with an uncertain future and the customers understand that," says Poirier. "There has been a lot of communicating with customers about the changeover. CN has helped them understand what a short line is, along with RailTex, who met with them prior to the changeover, and told them who they were and what their plans were."

Also, Mike Cater remains as CN's marketing person on the line. He has customers who deal with him as well as CB & CNSR. "The reason for that," explains Poirier, "is that a short line is a switching carrier

the billing and will still be involved directly with customers on service matters. These customers are still very much CN's customers. CN is still very much a part of the Truro-Sydney line. The difference is we now have a partner who is taking care of local needs on the operating side, and helping attract new business. The exception, of course, is traffic that doesn't leave the line. On that traffic, CN is no longer involved."

New Business for CN

In a separate but related matter, CB & CNSR has also acquired locomotives that were due to be retired from CN. Some have been purchased and some have been leased. CB & CNSR is also buying ballast from CN for track maintenance. "We feel we have a customer as well as a long-term partner. There will be close collaboration on many fronts," says Poirier.

"There are still a lot of things being sorted out. But so far things are going very well," says Poirier, "with the initial transition going better than expected. RailTex has a reputation as a very good quality short line operator, a company with a lot of experience behind it." Poirier, who views short lines in a very positive light, concludes "short lines are part of our future and part of our survival."

—CB & CNSR switches traffic to and from the Truro-Sydney line. CN is still the line haul carrier. CN's Customer Service Department still receives calls for car supplies. From a marketing point of view, nothing has changed. As a result, CN will do

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Renaissance de la ligne Truro-Sydney

«La ligne revit et le CN y est toujours présent.»

Claude Poirier, directeur Services de recherche

La vente à RailTex de la ligne Truro-Sydney peut, à première vue, sembler une perte pour le CN. Après tout, nous perdons une partie importante de notre réseau, se dit-on. Cependant, les apparences peuvent être trompeuses.

La mise en vente de la ligne, en septembre 1991, ne s'est pas faite sans susciter de controverse. Des nombreux obstacles qu'il a fallu surmonter, citons l'enquête du Sénat, l'opposition du gouvernement de la Nouvelle-Écosse et un examen de six mois de l'Office national des transports. Enfin, depuis le 1^{er} octobre 1993, RailTex, le nouveau propriétaire, a pris la relève et immédiatement entrepris l'exploitation du Cape Breton and Central Nova Scotia Railway (CB & CNSR), dénomination de l'entreprise exploitant la ligne Truro-Sydney.

RailTex en est, avec la ligne de Truro-Sydney, à son 22^e chemin de fer d'intérêt local (CFIL) en Amérique du Nord. Le CB & CNSR n'est que le troisième CFIL au Canada, et le premier dans l'Est. RailTex possède l'un des deux autres CFIL, soit celui qui se trouve en Ontario, le tronçon Goderich-Exeter.

«Grâce à une structure de coûts plus bas, des pratiques commerciales différentes et une tout autre approche du marché, les CFIL permettent de maintenir le trafic sur le rail, fait observer Claude Poirier, directeur Services de recherche. L'échange avec le CN, à Truro, de trafic en provenance et à destination de la ligne Truro-Sydney entraîne plus de trafic sur la voie principale du CN et nous profite donc vraiment.»

Comment fonctionne le Cape Breton and Central Nova Scotia Railway

«La plupart des employés du Cape Breton and Central Nova Scotia Railway sont d'anciens membres du personnel du CN», explique Claude



De la paperasse ! Autour de la table où se trouvent les multiples documents liés à la cession de la ligne Truro-Sydney du CN au chemin de fer Cape Breton and Central Nova Scotia Railway, on aperçoit, de gauche à droite : l'avocat du CB & CNSR Harry Munro, le directeur général du CB & CNSR Mark Westerfield, le directeur régional des Affaires juridiques du CN Myer Rabin, le directeur des Services de recherche Claude Poirier et l'avocat pour le compte du CN John Schiller.

Poirier. «En fait, plusieurs d'entre eux travaillaient à la ligne Truro-Sydney pour le CN et assurent, au fond, le même service. Le nouvel exploitant a un programme de partage des profits qui constitue une sorte d'incitatif pour le personnel. Chaque wagon supplémentaire qu'attire le Cape Breton and Central Nova Scotia Railway entraîne un bénéfice supplémentaire et encourage à décrocher de nouveaux contrats.»

Le directeur général du CB & CNSR, Mark Westerfield, vient des États-Unis et a dirigé quelques CFIL aux États-Unis et au Canada. Il est arrivé en août et a supervisé l'embauche du personnel et la mise en place de l'exploitation. Il a également supervisé le démarrage de la ligne Goderich-Exeter en Ontario, également acquise du CN.

Les clients

Quant aux clients que touche le changement de propriétaire, ils comprennent pourquoi le CN a procédé à cette vente. «C'était une façon de consolider un service à l'avenir incertain, explique M. Poirier. Il y a eu énormément de contacts avec la clientèle au sujet du changement de propriétaire. Le CN a aidé les clients à comprendre ce qu'est un CFIL, de même que RailTex, qui les a rencontrés avant que n'ait lieu le changement, s'est présenté et leur a fait part de ses plans.»

Mike Carter demeure responsable du marketing du CN sur la ligne. Certains de ses clients traitent avec lui de même qu'avec le CB & CNSR. «Car, explique M. Poirier, un CFIL est un transporteur de manœuvre. Le CB & CNSR

directement en relation avec des clients pour des questions de service. De nombreux clients sont encore des clients du CN. Et celui-ci fait encore bien partie de la ligne Truro-Sydney. La différence maintenant, c'est que nous avons un partenaire qui s'occupe des besoins locaux pour ce qui est de l'exploitation et aide à attirer de nouveaux contrats. Par contre, une partie du trafic reste évidemment sur cette ligne. Ce trafic n'est plus l'affaire du CN.»

D'autre part, le CB & CNSR a également acquis des locomotives que le CN allait bientôt retirer. Certaines ont été achetées et d'autres prises en location. Le CB & CNSR achète également du ballast du CN pour l'entretien de la voie. «En raison de tous ces arrangements, ajoute M. Poirier, nous avons l'impression d'avoir gagné un client de même qu'un partenaire à long terme. Il y aura étroite collaboration à plus d'un égard.

«Il reste encore beaucoup de choses à démêler. Mais jusqu'à maintenant les discussions se sont bien déroulées, explique M. Poirier. La transition s'est faite beaucoup mieux que ce qui avait été prévu. D'ailleurs, RailTex a la réputation d'être un CFIL de très bonne qualité, une compagnie qui a beaucoup d'expérience.» M. Poirier a une très bonne impression des CFIL. «Les CFIL font partie de notre avenir et de notre survie.»

(Photo : Dave Macintyre)

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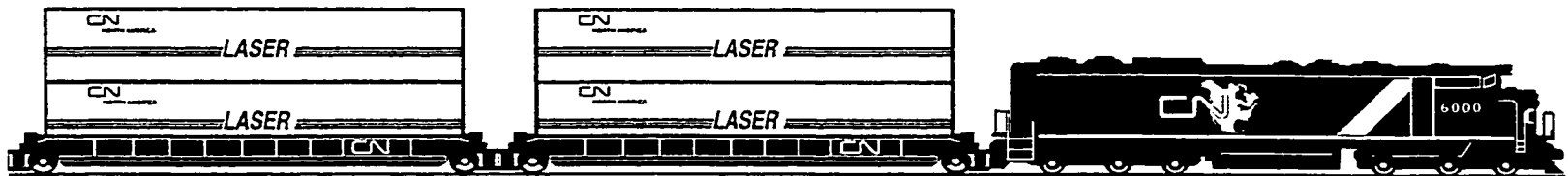


ATLANTIC REGION

LINES

PUBLISHED BY CN PUBLIC AFFAIRS, MONCTON

Season's Greetings



Halifax Intermodal Terminal: Opening the door to North America

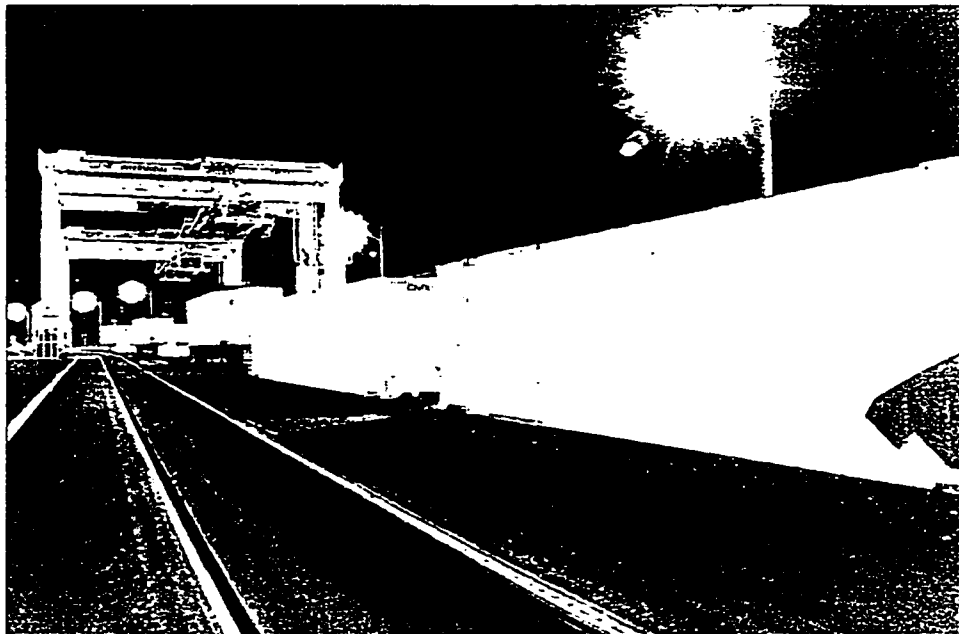
CN North America has built its intermodal service around understanding and responding to our customers' needs. With the establishment of the Halifax Intermodal

Terminal, which officially opened December 2, we've taken that commitment one step further by offering the only coast-to-coast double stack network on the continent.

The new facility is the latest in a number of strategically located hubs across the country, each linked by CN's Laser train service. With superior on-time performance, our Laser

trains are enabling shippers and receivers in Atlantic Canada to tap into the important Central Canadian and US markets.

Above and beyond the benefits to our door-to-door customers, the new terminal and extension of Laser train service to Halifax will prove to be an attractive transportation option for the long-haul trucking industry.

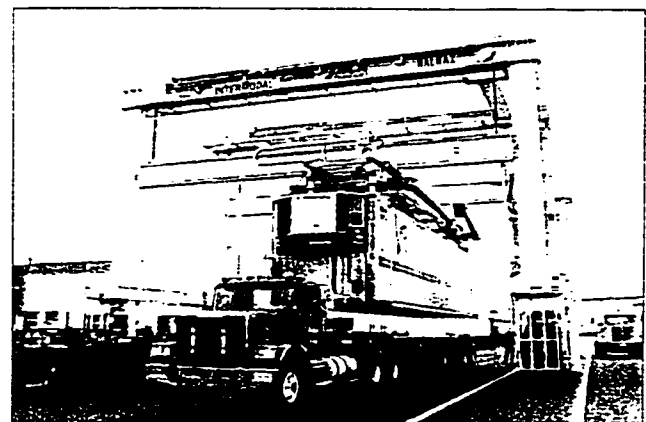


The new Halifax Intermodal Terminal, along with the extension of Laser train service to Halifax, are part of CN's strategy to increase revenue.

(Photo: John Wm Webb)

Below: An overhead gantry crane keeps container business moving day and night.

(Photo: John Wm Webb)



CN

ÉCHO

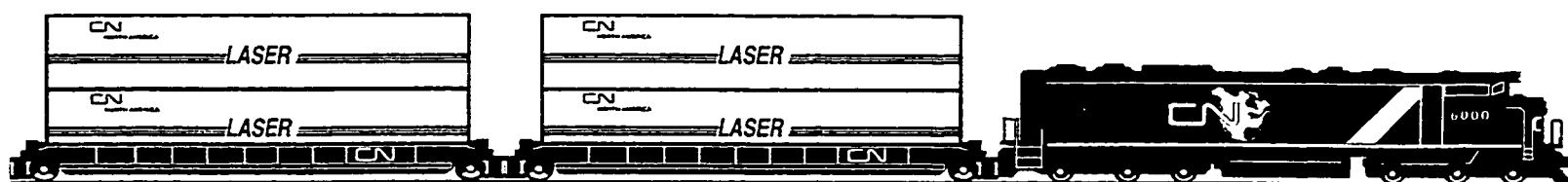
PUBLIÉ PAR LES AFFAIRES PUBLIQUES, MONCTON

RÉGION DE
L'ATLANTIQUE

RAIL

VOL. 10 N° 10 - DÉCEMBRE 1993

Joyeuses Fêtes



Le terminal intermodal de Halifax : porte sur l'Amérique du Nord

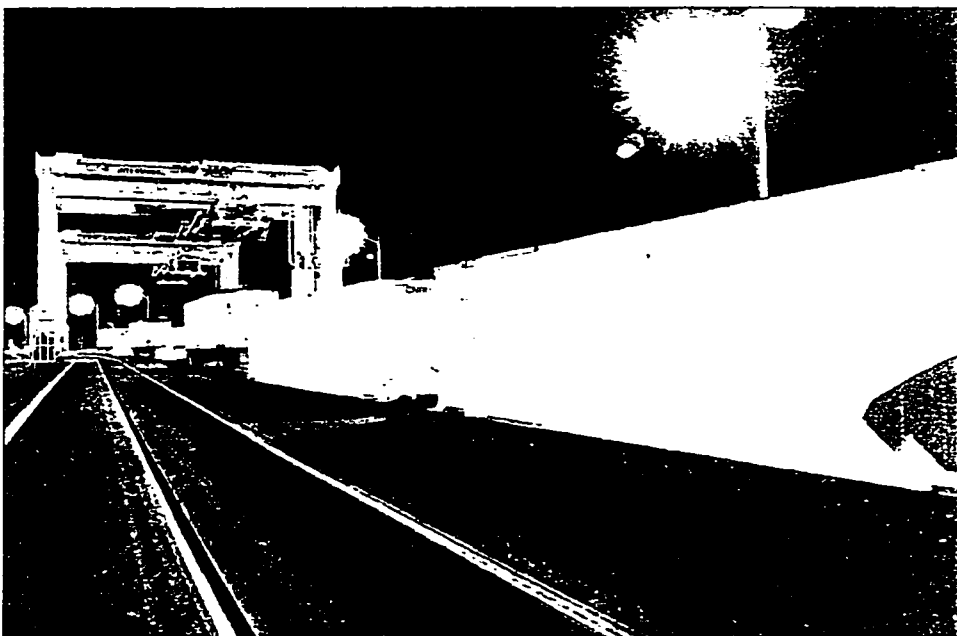
CN Amérique du Nord s'est taillé une place de choix comme transporteur intermodal en accordant la priorité absolue aux besoins des clients. L'intégration du terminal

intermodal de Halifax au seul réseau de transport de conteneurs gérés qui s'étend d'un bout à l'autre du Canada, vient confirmer notre engagement envers la clientèle.

Le terminal de Halifax, dont l'ouverture officielle a eu lieu le 2 décembre dernier, est le dernier-né d'une série de terminaux centraux stratégiquement situés dans

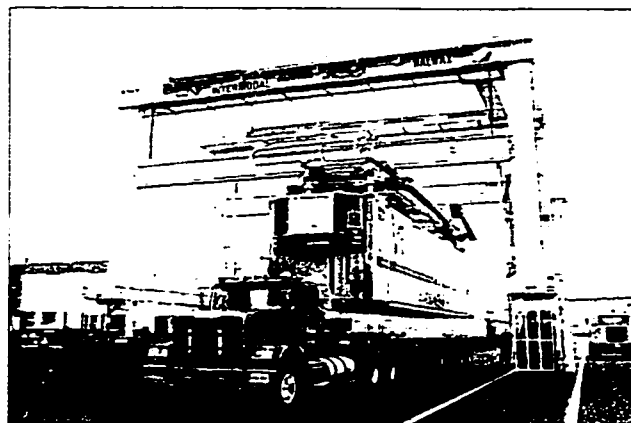
l'ensemble du pays, reliés entre eux par le service fiable et rapide du train Laser du CN. Grâce au rendement supérieur du train Laser, les expéditeurs et réceptionnaires du Canada Atlantique ont accès aux importants marchés du centre du Canada et des États-Unis.

En plus des avantages de notre service porte à porte, le nouveau terminal, ajouté au prolongement de notre service Laser à Halifax, constitue une solution de transport très attrayante pour les transporteurs routiers sur longue distance.



Le nouveau terminal intermodal de Halifax et le prolongement du service de train Laser jusqu'à Halifax s'inscrivent dans le cadre de la stratégie du CN visant à augmenter les recettes de la compagnie.

(Photo : John Wm Webb)



Grâce au portique, les conteneurs sont en affaires 24 heures sur 24.

(Photo: John Wm Webb)

We're making real progress

"1993 has been another challenging year. I'll be the first to admit that we've been through some difficult times and we're not out of the woods yet, but I do want to assure you that CN is making real progress. In that regard, I want to draw your attention to some of the significant positive initiatives that are helping CN reposition itself to emerge once again as a leader in the Atlantic Canada transportation industry.

The newly-completed Halifax Intermodal Terminal is a significant step forward for CN North America as we continue to market this efficient mode of transport using a "hub and spoke philosophy." In this respect, intermodal has been very successful in P.E.I. and is proving itself as well in Newfoundland. Our new terminal in Halifax will not only reduce some expenses, it will also provide us with an improved customer capability that will help us gain new business now moving over the highway. To facilitate this, we will continue to make changes in our train service design in order to remove any remaining impediments to consistent, reliable and safe transportation.



Vice-president Marv Blackwell

(Photo: Crandall Studio)

Partnerships with highway carriers like Maritime Ontario and Armour Transport are proving beneficial. The partnership with Maritime Ontario, a company with a commitment to the Maritime market, evolved at our Intermodal ramp at a time when we needed some for-hire truckers. Mutually beneficial partnerships like this one are paving the way for other types of business alliances. It makes good business sense to align ourselves with partners with whom we can do business comfortably. These partnerships will help us serve our customers better, and that's the key to our staying power. But it's not enough to run a competitive operation and call it quits there. Our customers want to

do business with people who they feel are committed to helping them succeed. We must be prepared to deal with basic fundamentals of good business amidst continuous and rapid change.

In this change environment, our greatest challenge is communicating effectively and on a timely basis. We are going through a process, whereby we are reducing the number of management layers. We've all played the word game where you get a group of people together and whisper a message in somebody's ear. You know by the time the message has passed through five or 10 people that it's quite different from what was said at first. The same thing happens with the management of a large organization like CN. There needs to be a faster way to get accurate information to and from our front-line personnel.

One of the ways we are trying to communicate more openly with our employees is by carrying out "town hall" meetings. About a year ago we held 23 meetings across the Atlantic Region and since this spring, our president, Mr. Tellier, has held several sessions on the Atlantic Region. He was here as recently as early this month, talking to employees at our Halifax Intermodal Terminal opening. An open

discussion and an emphasis on customer service has been consistent in all these sessions. Regional officers will be holding more of these types of dialogue sessions in the coming year.

More than ever before we are placing our emphasis on front-line personnel. Most of you have had the opportunity to attend one of the more than 125 information sessions held regarding our new service reliability strategy and how we are spending \$100 million to reconfigure all our computer systems. This investment will let us move in the direction of a scheduled railway and will provide information to our front-line employees that will enable them to be more proactive in a way that existing data systems do not.

In the past few years, we have spent over \$2 million on quality training on the Atlantic Region, which has given us a major step forward with regard to understanding the importance of customer satisfaction and the benefits of working together effectively. Change is never easy, but the innovations that have come out of quality initiatives have proven that employees on the Atlantic Region are eager to be part of changing CN for the better.

In the years to come we will continue to be involved in constant change. The exciting challenge for all of us is to search for opportunities that will help us transform CN. To accomplish this, we need to adopt a collective competitive spirit and renew our sense of pride in our accomplishments.

In closing I would like to thank you for some key improvements the Atlantic Region has achieved through a good team effort in 1993. Our safety record for disabling injuries is on track for a substantial improvement. While we still need to do better, our overall customer service satisfaction ranking is currently the best on the System. And when the regional profitability data is developed at year end, the Atlantic Region should have continued to have achieved good improvements over the previous year.

Best wishes to you and your family for a happy healthy holiday season!"

Marv Blackwell
Vice-president

Le Canadien National fait de beaux progrès !

L'année 1993 a été, comme tant d'autres, une année remplie de défis ! Je serai le premier à vous avouer que nous avons eu notre grande part de difficultés et que la vie n'est pas encore toute rose pour les employés du CN, mais je veux vous assurer que nous avons fait beaucoup de progrès ! Sous ce rapport, je veux attirer votre attention sur certaines des initiatives importantes qui aident le CN à se repositionner sur la place du marché pour émerger encore une fois comme un chef de file de l'industrie des transports au Canada Atlantique.



Marv Blackwell, vice-président

(Photo : Crandall Studio)

La formation de partenariats avec des transporteurs routiers tels que Maritime Ontario et Armour Transport s'avèrent profitables. Notre partenariat avec Maritime Ontario, une compagnie qui a un engagement envers le marché des Maritimes, a évolué aux services intermodaux à un moment où le CN avait besoin de camionneurs indépendants. Des partenariats mutuellement profitables comme celui-ci ouvrent la voie à d'autres genres d'alliances commerciales. Il est tout à fait naturel de s'allier avec des partenaires avec qui nous sommes à l'aise. Ces partenariats nous aident à mieux servir notre clientèle, et c'est là la clé de notre survie. Il ne suffit pas, cependant, de gérer une entreprise compétitive. Nos clients veulent traiter

avec des gens qui ont leur succès à cœur. Nous devons accepter d'honorer les principes de base des relations commerciales au sein d'un monde des affaires toujours en changement.

Dans cette ère de changement, notre plus grand défi est celui de communiquer efficacement avec nos clients et ce, en temps opportun. Nous sommes donc à réduire le nombre d'échelons hiérarchiques au CN. Nous avons tous déjà joué au jeu du téléphone où, dans un groupe de cinq à 10 personnes, une personne chuchote un message à l'autre, et ainsi de suite. Le message final est drôlement différent du message initial. La même chose se produit au sein d'une société aussi grande que le CN lorsqu'il est question de transmettre directives et informations. Il faut donc trouver une façon plus rapide et plus efficace de donner des directives précises aux employés en contact direct avec les clients et de recevoir des renseignements d'eux.

Dans ce but précis, nous tentons de communiquer plus ouvertement avec nos employés en tenant des réunions ici et là avec eux. Il y a un an environ nous avons tenu 23 réunions du genre d'un bout à l'autre de la région de l'Atlantique. Depuis ce printemps, notre président, M. Tellier, a tenu plusieurs séances sur la région de l'Atlantique et il s'est entretenu avec les employés aussi récemment qu'au début du mois,

lors de l'ouverture du terminal intermodal de Halifax. Au cours de toutes ces réunions, la visée du CN a toujours été la même : l'ouverture d'esprit et le service à la clientèle. Les dirigeants régionaux tiendront d'autres séances du genre au cours de l'année à venir.

Plus que jamais, nous mettons l'accent sur le personnel en contact direct avec le client. Beaucoup ont eu l'occasion d'assister aux plus de 125 séances d'information données sur notre nouvelle stratégie fiabilité de service et, sous ce rapport, nous dépensons 100 millions de dollars pour la reconfiguration de notre réseau informatique. Cet investissement nous permettra de devenir un chemin de fer fidèle à son horaire et de fournir à notre personnel en contact direct avec les clients des informations qui lui permettront de prendre des initiatives qu'il lui était impossible de prendre auparavant.

Nous avons déboursé plus de deux millions de dollars au chapitre de la formation qualifiée au travail sur la région de l'Atlantique, ce qui nous a mieux aidés à comprendre l'importance de satisfaire le client et les avantages de la collaboration. Le changement n'est jamais facile, mais les innovations issues des initiatives qualifiées au travail ont prouvé que les employés de la région de l'Atlantique veulent changer le CN pour le mieux.

Au cours des années à venir, nous continuerons à évoluer. Le défi à relever, pour chacun de nous, est celui de rechercher de nouvelles occasions de transformer le CN ! Pour réussir, nous devons être animés d'un esprit d'équipe et de compétition qui nous insufflent une fierté de l'accomplissement.

Je désire vous remercier pour les améliorations clés réussies sur la région de l'Atlantique en 1993 grâce à un bel effort d'équipe. Notre fielle de sécurité en ce qui a trait aux blessures invalidantes s'est beaucoup améliorée. Même s'il y a toujours place à l'amélioration, nous avons, dans l'ensemble, la meilleure cote du réseau au chapitre de la satisfaction des clients. En matière de rentabilité, la région de l'Atlantique s'est beaucoup améliorée comparativement à l'année précédente. Nous pourrions ainsi être fiers de nos réalisations.

Je désire vous souhaiter, à chacun de vous et à votre famille, une heureuse période des fêtes.

Marv Blackwell
Vice-président



ATLANTIC REGION

New Intermodal Terminal for Halifax

"A win situation for all concerned."

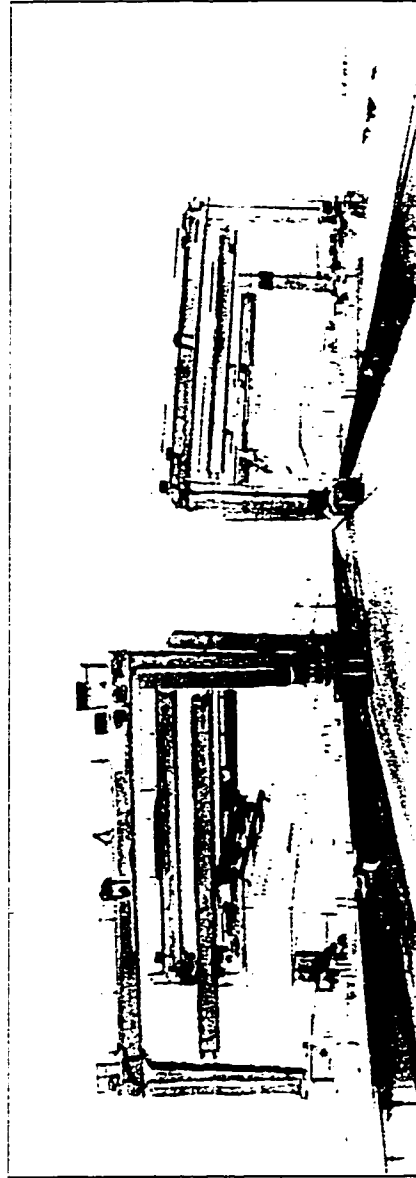
Marv Blackwell
Vice-President

HALIFAX — On March 4, 1993, CN announced the beginning of construction of its domestic Intermodal Terminal in Halifax.

"The completion of this terminal allows us to extend Laser service right into Halifax, which will provide major advantages to CN and the customers we serve in and out of the Region," explained Regional Vice-President Marv Blackwell. In describing further benefits, he said "truckers get a safe, efficient and reliable distribution system at less cost than the present over-the-road option; the provinces benefit from lower maintenance costs on the highway network and the general public gains because the extended use of rail results in an environmentally friendlier alternative and a much safer road system."

Construction of the state-of-the-art terminal, the intent in a number of strategically-located terminals across the country, is to begin this spring with completion targeted for later this year. These terminals are connected by CN's Laser service with its high rate of reliability, which, according to Regional Manager Intermodal, Brian Haggerty, "is what the customer ultimately wants as far as service is concerned. Our rate structure, the new terminal and the extension of Laser to Halifax should enable us to remain competitive well into the future. In addition, we're looking at being able to maintain our present time frame of second-morning delivery into Halifax from Montreal, Toronto and central Canada."

In 1986 the Moncton Intermodal Terminal was built and Laser service was extended from Central Canada to Moncton. The new terminal in Halifax, combined with Laser into the port city, represents the latest step in Intermodal's strategic plan for the Region. Other important elements of Intermodal's



An artist's rendering of the Intermodal Terminal scheduled to be built in Halifax beginning in the spring.

plan, which have been implemented over the past few years, are:

- conversion from 48-foot trailers to 48-foot containers;
- double-stacking of those containers;
- acquisition of the "blue" double-stacked container rail cars (vital to the import/export business through the Port of Halifax).

Haggerty says the construction of the new terminal will complement CN's cost efficiency in other areas such as fuel-efficient locomotives, empty cars, and two-man crews.

"The new Terminal presents CN with the opportunity and challenge to work more closely with the trucking industry. Competition is stiff and will continue to be. Ease of entry, particularly for large trucking firms from the U.S., increased free flow of goods across the border and the completion of

the four-lane highway will give trucking a major edge," says Haggerty.

"There will always be areas where competition is healthy and required, but in many instances

there are opportunities to work with the trucking industry alliances," explains Haggerty. "By encouraging them to make use of the more cost-efficient rail option, everyone comes out a winner, and this is what we are recommending."

The new Halifax Intermodal Terminal also fits well into the concept of an integrated Transportation Policy presently under consideration by some provincial governments and other interested transportation stakeholders in the Maritime Region. It is an idea concerned with formulating public policy and making fiscal and funding decisions in such a manner that the advantages of each transportation mode are maximized, with the full knowledge as to how these decisions will affect all aspects of the transportation infrastructure.

"Whether new opportunities come from trucking alliances or simply from growth in our own business, volume is required to make the railway more efficient in the movement of goods," states Haggerty. "This, coupled with timely and reliable Laser service, makes for an attractive package to offer shippers throughout Atlantic Canada. The new Terminal is just the thing to ensure that happens."

"It is," concludes Blackwell, "a win situation for all concerned."

Un nouveau terminal intermodal pour Halifax

«Une situation gagnante pour toutes les parties concernées !»

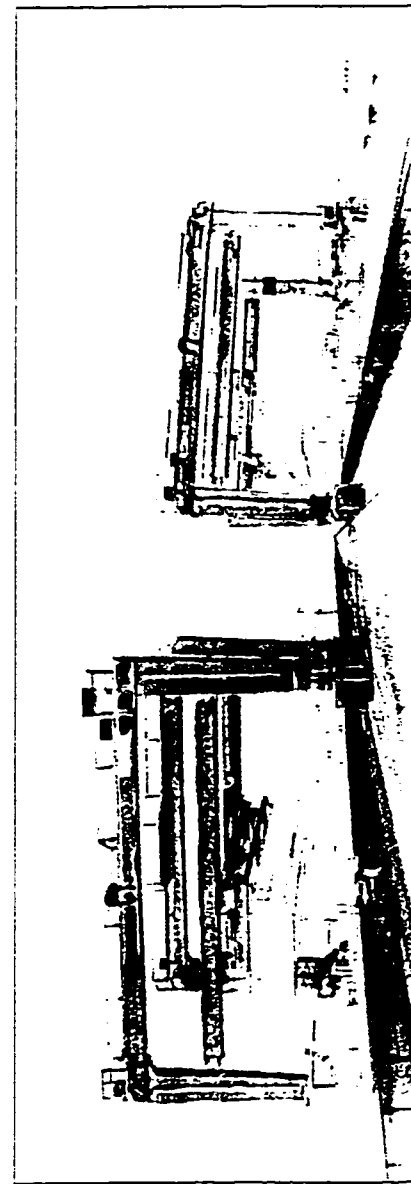
Mary Blackwell, vice-président

HALIFAX — Le 4 mars 1993, le CN a annoncé le lancement du projet de construction de son terminal intermodal à Halifax.

«Le parachèvement du terminal nous permettra d'étendre notre service de trains Lasser jusqu'à Halifax, ce qui, par le fait même, avancera grandement le CN et ses clients sur la Région et ailleurs», explique le vice-président de la Région Mary Blackwell. En dérivant les autres avantages du terminal, il a déclaré : «Les consommateurs bénéficieront ainsi d'un système de distribution sûr, efficace et fiable à un coût moindre que l'option actuelle de transport par route : les provinces bénéficieront de la baisse des frais d'entretien du réseau routier et le grand public en sortira grand gagnant, car l'utilisation accrue du rail est une option moins nuisible pour l'environnement et bien plus sûre que le réseau routier.»

La construction du terminal des plus modernes, le dernier de plusieurs terminaux stratégiquement situés d'un bout à l'autre du pays, doit débiter ce printemps et on prévoit son parachèvement avant la fin de l'année. Ces terminaux sont tous reliés au service de trains Lasser du CN, dont le haut taux de fiabilité, au dire du directeur régional Services Intermodaux Brian Haggerty, «est ce que le client recherche ultimement côté service. Notre système de prix de transport, le nouveau terminal et l'extension du service de trains Lasser jusqu'à Halifax permettront au CN de demeurer compétitif pour de nombreuses années à venir. De plus, nous étudions la possibilité de maintenir depuis Halifax notre livraison le suralimenté marin à Montréal, à Toronto et au Canada central.»

En 1986, le CN construisait le Terminal intermodal de Moncton et étendait jusqu'à Moncton le service de trains Lasser depuis le Canada central. La construction du nouveau terminal de Halifax et l'extension du service de trains Lasser jusqu'à la ville portuaire représentent le plus récent développement dans le plan d'action stratégique du CN pour la Région. Voici d'autres



De main d'artiste, voici un croquis du terminal intermodal dont la construction doit débiter ce printemps à Halifax.

projets importants qui ont été réalisés dans la Région au cours des dernières années :

- le remplacement des remorques de 48 pieds par des conteneurs de 48 pieds ;
 - le garbage de ces conteneurs ;
 - l'acquisition de wagons «bleus» à deux niveaux de chargement (ceux-ci sont de première importance pour le service d'importation et d'exportation via le port de Halifax) ;

Haggerty dit que la construction du nouveau terminal complètera l'efficiency du CN dans d'autres secteurs : locomotives à faible consommation de carburant, trains sans freinage de queue et équipes de deux personnes.

«Le nouveau terminal donne au CN l'occasion, et nous lui donne le défi, de travailler en collaboration plus étroite avec l'industrie du camionnage. La concurrence est très forte entre les différents modes de transport et continuer de l'être : la facilité, spécialement pour les grosses entreprises

de camionnage américaines, de pénétrer sur le marché canadien, l'augmentation du trafic de marchandises de part et d'autre de la frontière et le parachèvement du réseau routier à quatre voies avantageront fortement l'industrie du camionnage», affirme Haggerty.

plus économique, tout le monde y gagne, et c'est ce que nous recherchons.»

«Il y aura toujours des secteurs où la concurrence est rude et même délicate, mais dans bien des instances, il est possible de former un partenariat avec l'industrie du camionnage», poursuit Haggerty. «En encourageant l'utilisation de l'option ferroviaire plus économique, tout le monde y gagne, et c'est ce que nous recherchons.»

Le nouveau terminal intermodal de Halifax cadre bien avec le concept d'une politique de transport intégrée, dont plusieurs gouvernements provinciaux et d'autres dispositions d'enjeux du marché du transport aux Maritimes font l'étude. On veut ainsi formuler une politique publique et prendre des décisions fiscales et financières en vue de maximiser les avantages de chacun des modes de transport, sachant pleinement comment ces décisions touchent tous les aspects de l'infrastructure du transport.

«Que de nouvelles occasions proviennent d'ententes de partenariat avec les entreprises de camionnage ou de la croissance de notre propre clientèle, nous avons besoin d'un plus grand volume de trafic pour maximiser l'efficacité du fer», affirme Haggerty. «Aujourd'hui, c'est un service de trains Lasser fiable et à temps et nous avons un fort allié pour les expéditeurs du Canada Atlantique. Le nouveau terminal est notre garantie de succès.»

«Il s'agit d'une situation gagnante pour toutes les parties concernées !», souligne Blackwell.

APPENDIX X

Copies of *Le Laurentien* / *The Laurentian* Articles



Quand un message est crédible, il passe...

Une équipe de train : deux hommes. Début de la journée. Quelque part dans le district.

- Salut Bob, comment ça va ?
- Salut mon Roger, ça va.
- Aie, as-tu vu François à souère ?
- Imagine-toué donc qu'il a bouqué malade.
- À souère, on a une belle p'tite brakette.
- Ah oui. Qui ça ?
- Pauline.
- Pas celle qui a des p'tites fesses ?
- Ouais. Pis j'pense qu'à marche à part ça !

Autre scène. Autre équipe de train. Deux femmes, un homme. Fin de la journée. Quelque part dans le district. Assis à une table, une femme regarde une revue porno.

- Regarde ça, cé-tu assez greyé ça !, dit-elle à sa collègue.
- Ça m'en prendrait une de même à souère.
- Prends-en une à souère cé toute !, de répondre son collègue.
- Oui mais cé la tienne que j'veux.
- Y en a une dans'livre, t'a partageras avec elle...
- En parlant de partager, y reste rien'que deux chambres. Avec qui tu vas la partager ?

Ces deux extraits proviennent du vidéo *Ça n'arrive qu'aux autres*, produit par le comité contre le harcèlement sexuel du district Laurentien. Le vidéo a été réalisé par des membres du personnel itinérant à l'intention du personnel du Transport.

Un langage franc, direct. Percutant même. Qui ne laisse aucune équivoque et qui en a fait sourciller plus d'un...

Les membres du comité l'avouent. Aucun vidéo portant sur le harcèlement sexuel réalisé par différents organismes ou entreprises ne les avait satisfaits : dialogues trop léchés, scénarios qui ne montraient que du harcèlement envers les femmes, harcèlement concentré dans les bureaux, etc.

Rien ne collait à la réalité... ferroviaire. Le message n'aurait jamais passé. De là, ils décidèrent d'écrire sans faire aucun compromis. C'était ça ou rien du tout.

≈

Lundi 23 février. Dans une salle de conférence d'un hôtel de Montréal, plus d'une vingtaine de superviseurs de l'Ingénierie participent à leur réunion annuelle. À l'ordre du jour figure l'atelier de sensibilisation. S'ensuit le vidéo entrecoupé des commentaires des deux animateurs membres du comité. Le message passe bien ; le niveau de compréhension est excellent. Personne ne s'est offusqué du langage. Pas étonnant que les superviseurs aient exprimé l'avis que les ateliers devraient être offerts à tout le personnel de l'Ingénierie.

≈

C'est un véritable tour de force que le comité contre le harcèlement sexuel a réussi. Le programme a été bâti à partir d'un petit budget inversement proportionnel à son succès. Le message est clair comme de l'eau de roche et les 91 p. 100 des gens du transport qui ont assisté aux ateliers l'ont fait pendant leur temps libre et non pas pendant les heures de travail.

Enfin, il faut retenir ce commentaire pertinent de l'un des membres du comité : «Que ce soit une leçon pour la région. Quand on veut faire passer un message aux wagonniers, on le fait passer par les wagonniers. Pis, si c'est pour les mécaniciens : même chose. Le message passe mieux et plus rapidement. On se comprend parce qu'on vit les mêmes problèmes.»

Voilà, le message est passé. Un message empreint de crédibilité. **L**



Jean-Charles Neault

Talking the same language

A train crew: two men. Morning, somewhere in the District.

Roger: Hey, Bob. How ya doin'?

Bob: Not bad, Roger. 'N you?

Roger: Can't complain.

Bob: Frank hasn't shown up yet?

Roger: He called in sick, so they're sending over one of those cute little lady brakemen.

Bob: Is that right? What's her name?

Roger: Pauline.

Bob: Isn't that the one with the nice round butt?

Roger: Yeah. And I'll bet you anything she puts out.

Another scene. Another train crew. Two women, one man. End of the day, somewhere in the District. A woman, sitting at a table, is looking at a copy of an erotic magazine for women.

Joanne: Hey! Look at the size of this one.

Lynn: I'd love to have one like this tonight.

Bill: Well, go ahead and have one.

Lynn: But you have the one I want.

Bill: There's one in the book. Share it with her.

Joanne: Share and share alike!

Lynn: Speaking of sharing, there are just two rooms left. Who do you want to share with?

These two excerpts come from a video called "It couldn't happen to me!" produced by running trades employees from the Laurentian District Committee on Sexual Harassment, for Transportation employees.

The video pulls no punches. It uses clear and frank language, and leaves little to the imagination. And it has raised some eyebrows.

But then the committee members knew it would. They watched plenty of videos on sexual harassment produced by different organizations and companies, but found them all lacking. Either the language was too polished, or the videos showed only harassment of women or only in office settings.

They didn't think that any of the videos they watched showed things as they are on the railway. The message would have been wasted. So they decided to write their own, in language that everyone could identify with. It was that or nothing.

≈

Monday, February 23. In a conference room in a Montreal hotel, more than 20 Engineering supervisors were attending their annual meeting. The sexual harassment awareness workshop was on the agenda; the video was broken into three segments, each followed by comments of two discussion leaders representing the committee. The message went over well; everyone understood exactly what the video was getting at. No one found the language offensive. Not surprisingly, the supervisors agreed that the workshops should be offered to all Engineering employees.

≈

The members of the Committee on Sexual Harassment have a lot to be proud of. Their program has been an immense success, despite a small budget. The message they are sending out comes across loud and clear, and the 91% of Transportation employees who attended the workshops did so on their own time, not during working hours.

One of the committee members summed the experience up well: "Let this be a lesson for the Region. When you want to get a message across to carmen, let carmen do it. The same thing for engineers. The message comes through better and faster, because the people giving it and receiving it share the same experiences."

The end result is a believable message, clearly understood by all. **L**

Une restructuration essentielle



«Le système n'est qu'un outil, le personnel, les processus et les moyens matériels doivent aussi changer pour mieux répondre aux besoins du client.»

- Claude Montpetit, coordonnateur régional Objectif fiabilité

par JULIE GOULET

La fiabilité est grande chez les membres de l'équipe Objectif fiabilité et les représentants du CSC qui se préparent à vivre un grand moment dans l'histoire du CN. De gauche à droite sur la première rangée : Ernest Belisle et Yvon Carrière tous deux représentants au CSC. Sur la deuxième rangée : Claude Montpetit, coordonnateur régional ; Jacques Coulombe, agent de liaison ; Robert Bélanger, agent régional ; Robert Pine, agent de liaison et François Brunet, agent de liaison.

Plus qu'un système informatique à la fine pointe de la technologie, Objectif fiabilité repose sur une toute nouvelle stratégie commerciale qui vise à satisfaire les besoins de la clientèle et à accroître le chiffre d'affaires du CN.

«Pour devenir un chemin de fer à service programmé et atteindre notre objectif de 95 p. 100 de fiabilité, nous misons autant sur le système du Santa Fe que sur l'engagement des membres du personnel CN, explique Claude Montpetit, directeur régional Objectif fiabilité. La restructuration à laquelle nous procédons présentement ne saurait porter fruit sans que tout soit mis sur la table, tant nos processus que nos moyens de production. Pour satisfaire le client, il ne faut rien négliger», soutient-il.

Cette préoccupation du client à tous les niveaux de la Compagnie sera grandement facilitée par la mise en place du système du Santa Fe que l'on adapte actuellement aux besoins du CN. À la région, un groupe de spécialistes veille au grain afin que le produit que l'on est à mettre sur pied corresponde à nos besoins. Pour Robert Bélanger, qui agit à titre d'agent régional Objectif fiabilité, la restructuration du chemin de fer constitue une véritable révolution. «Nous pouvons comparer ce changement profond à

l'arrivée du diesel, soutient-il. Nous sentons tous que nous vivons un grand moment dans l'histoire du CN.»

La nouvelle technologie informatique achetée du Santa Fe permet de regrouper en un même endroit plusieurs de nos systèmes d'exploitation. Sont donc rassemblés en une seule base d'information les systèmes TRACS, YIS, IMPACT et le système d'établissement des feuilles de route, ce qui permettra à chacun d'avoir accès au même système et de partager les mêmes données. Le nouvel outil informatique est structuré en modules dont la pièce maîtresse, le bloc des systèmes transport (système TSS), compte pour 75 p. 100 de l'ensemble.

Tous les modules ont le même air de famille et donnent la même impression à l'utilisation, ce qui rend facile l'apprentissage des différentes applications. La formation permettra d'améliorer le lien le plus important, soit celui qui existe entre chaque personne ayant une relation directe avec le client et les systèmes. «Toutefois, précise Camille Dion, directrice Ressources humaines Objectif fiabilité, nous voulons aller au-delà de la formation technologique en offrant, entre autres, des



➤ Restructuration

suite de la page 4

sessions d'orientation qui permettront à quelque 550 personnes de la région de comprendre et de s'imprégner de la stratégie de changement du CN pour y participer à 100 p. 100.»

Puisque dans le domaine du transport rien n'est tout à fait sûr, le CN se devait de mettre toutes les chances de son côté pour satisfaire le client. En devenant un chemin de fer à service programmé, il pourra mieux faire face aux intempéries, aux bris de matériel ou à la volte-face de certains clients.

En effet, le personnel qui gère le réseau sera en mesure d'analyser les scénarios susceptibles de régler ces dysfonctionnements pour donner satisfaction aux clients. Dorénavant, le plan d'acheminement de l'envoi de son point de départ à son point d'arrivée pourra correspondre à l'engagement pris envers la clientèle puisque le CN disposera des moyens nécessaires pour rattacher le bon wagon au bon train le bon jour... **L**



Redesigning the Railway



Service Reliability Strategy (SRS) is more than a highly advanced computer system. It is based on a whole new business strategy aimed at satisfying customer needs and boosting CN's business. "If we want to become a scheduled railway and reach our objective of 95% reliability, we are depending on both the Santa Fe system and the commitment of CN employees," explains Claude Montpetit, regional coordinator, SRS. "This re-engineering process at CN won't succeed unless we take a new look at everything, our processes and our technology. We can't neglect any aspect of customer satisfaction," he stresses.

The Santa Fe system, now being modified to meet CN requirements, will go a long way toward meeting this overriding concern with customer satisfaction, at all levels throughout the Company. On the Region, a group of experts is following everything closely to make sure that the product being implemented will meet CN's needs. For Robert Bélanger, regional officer, SRS, this restructuring is nothing less than a revolution. "It's as big a change as the introduction of diesel power," he

explains. "We all feel as though we're witnessing a crucial point in CN's history."

The new computer technology purchased from Santa Fe makes it possible to combine a number of our systems. The TRACS, YIS, IMPACT, and waybill systems are all now one database, giving everyone access to the same system and the same data. The new computer system has a modular structure; the key module, the Transportation Support Systems (TSS) block, represents three-quarters of the system.

All the modules have the same look and feel for users, making it simpler to learn the different applications. Training will strengthen the most important link, the employee acting as the interface between customers and the system. According to Camille Dion, director - Human Resources - Service Reliability Strategy, CN wants to give employees more than just technological training. The goal is to give some 550 people on the Region the information they need to understand every

"The system is just a tool. People, processes and resources also have to change to better meet customers' needs."

— Claude Montpetit, regional coordinator, Service Reliability Strategy

by JULIE GOULET

The Service Reliability team and CSC representatives are all enthusiastic about the introduction of the Waybill module. From left to right, first row: Ernest Belisle and Yvon Carrière, CSC representatives; second row: Claude Montpetit, regional coordinator; Jacques Coulombe, liaison officer; Robert Bélanger, regional officer; Robert Pine, liaison officer; and François Brunet, liaison officer.

Redesign - continued on page 5



> Redesign

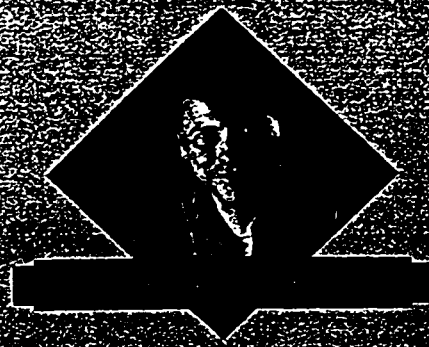
Continued from page 4

aspect of CN's strategy for change, so that they can commit themselves to it totally.

Since nothing is ever guaranteed in the transportation industry, CN needs to do everything it can to ensure customer satisfaction. As a scheduled railway, it will be better equipped to handle bad weather, breakdowns, and even last-minute changes in customer orders. The employees managing the system will

be able to analyze different ways of coping with such problems and give customers the service they expect. In future, CN can give customers a firm commitment, because it will have the tools it needs to make sure that the right car is picked up by the right train on the right day, and taken to the right destination. **L**





Le conformisme - père de bien des maux chez nous...

Nous vivons présentement une époque disons tumultueuse au CN. Projet d'amélioration du service à clientèle. Objectif stabilité. Jus on avec le CIP, compréhension de l'efficacité qu'on d'autre encore. Dans notre environnement de travail actuel les améliorations de la performance sont d'ordre du jour. Mais que nous semble changer et se dérouler d'un rythme effarant. On dit qu'on n'a plus le chemin de fer qu'on avait!

Scénario de notre quotidien nous voit confronté à un problème. Notre réaction devient un réflexe.

1. fouillons notre mémoire pour trouver une situation similaire déjà vécue et appliquons la même solution que d'autre fois.

2. consultons, si possible, un confrère ou une collègue plus expérimenté(e) qui a peut-être une solution toute faite pour régler le problème.

3. vérifions bien vite (oh misère!) s'il n'y aurait pas quelque chose d'éclairé sur la manière de traiter pareilles circonstances.

Et voilà, problème résolu. C'est rapide, efficace, pas de zigzagage, comme dirait l'annonce publicitaire, et on peut alors passer à autre chose (et Dieu sait qu'on en a des choses à faire de nos jours!).

C'est rapide, oui, ça nous permet de passer à autre chose, oui, mais efficace? Pas vraiment. À preuve, cette approche se fonde sur la répétition du problème!

En fait, ce réflexe nous fourre carrément en boîte. Il nous mène droit au problème du conformisme.

« On a toujours fait ça de même! »

« On a toujours payé ça! » ou « On a toujours été payé pour ça! »

« Je n'ai jamais eu à faire ça, alors c'est pas ma job! »

Le conformisme, c'est le respect étroit de la norme, de la tradition, des usages établis. C'est sécurisant dans le tumulte, car cela entretient notre confort personnel face aux changements en cours.

En fait, notre « réflexe » face à un problème ne règle en rien la source de ce problème. Tout ce qu'il permet, c'est l'élimination rapide et temporaire de l'inconfort qui l'accompagne.

L'analogie qui me vient à l'esprit ici est celle du sportif qui, souffrant d'une entorse à la cheville, « gèle » celle-ci pour éliminer la douleur et pouvoir ainsi prendre part au match. Procéder de la sorte est d'ailleurs la norme. Agir autrement dans certains sports comme le football représenterait un affront à la tradition.

Mais, même au football, on sait que l'entorse devra être traitée et que le plus tôt sera le mieux. L'athlète blessé sait aussi qu'il aura un rôle essentiel à jouer pour accélérer son rétablissement.

Oui, je sais, ça fait « cliché ». Seulement voilà, cela illustre bien la futilité de vouloir entretenir un réflexe qui perpétue les causes d'un problème. Continuer sur cette lancée indique que nous acceptons de nous contenter d'une vision à très court terme. Faudrait pas alors qu'on se lamente trop fort de ne pas pouvoir voir « ou on s'en va »!

En ce qui me concerne, je préfère troquer mon appartement conformiste et douillet avec vue sur l'édifice d'en face pour l'autre beaucoup plus risqué et inconfortable mais d'où je peux admirer le lever du jour. Passez donc faire un tour... juste pour voir. **L**

Claude

Directeur relations de travail
Ressources humaines



Conformity—the root of a lot of our problems

How frequently can I go through such a tumultuous time: customer service improvement programs, MRS. C/S/EP merger, job reductions? What else can there be? Performance improvement is a must in our day-to-day operations. Some changes and events take place around us at an incredible pace. I cannot tell you one thing, one only way sure, for what it is going to be.

What happens when we find a problem in our daily work? Our reflexes take over.

1. We try to recall what we did in a similar situation and we use the very same solution.

2. We consult a more experienced co-worker if there is one, hoping that they will hand us a ready-made solution.

3. We quickly find out if anything has been written (a real life aspect) about how to handle such a situation.

And that's that. The problem has been solved rapidly and efficiently. Straight to the point. And we can get on to other matters (and all of us certainly have other things to do these days).

In actual fact, this type of behaviour locks us right into a box. It leads straight to conformity.

"We've always done it that way!"

"We've always paid that amount!" or "We've always paid for that!"

"I've never had to do that, so it's not my job!"

Conforming means following the letter of the law, always keeping with tradition, using only established practices. It makes us feel safe and secure in times of trouble, in times of great change.

In fact, acting by reflex doesn't get rid of the source of the problem. It just makes us feel a little less uncomfortable, but that's very temporary.

It makes me think of the athlete who's sprained his ankle and freezes it to deaden the pain so he can stay in the game. That's the normal procedure. Doing anything else in a sport like football would mean a break with tradition.

But even in football everyone knows that the sprain has to be treated—and the sooner the better. The injured athlete also knows that he has a key role to play in regaining his health.

Oh yeah! I know that this all sounds like a cliché. But it illustrates the futility of going along with a reflex action that merely perpetuates the causes of a problem. Going on as we have means settling for a very short-term future. We really shouldn't complain too loudly that we can't see where we're going.

As for me, I prefer to give up my safe, standard apartment, so like thousands of others, with its view of the building across the way, for a much more rustic, sometimes uncomfortable one, where I can admire the sunrise. Drop by... for a look-see. **L**

Claude

Claude St-Cyr
Manager, Labour Relations
Human Resources

Le pari de mieux servir les clients

Est-il possible de mieux servir nos clients en les amenant à mieux se servir eux-mêmes ? C'est le pari du programme Wagon propre mis sur pied dans le cadre du Programme d'amélioration des services à nos clients. Affirment-ils, le programme Wagon propre permettra au CN de maintenir ses coûts à un niveau raisonnablement compétitifs à nos clients.



Yves Lemieux

Le programme Wagon propre repose sur une logique assez simple : si chaque receveur nettoie ses wagons avant de les laisser repartir, le cycle de retour est immédiatement raccourci, ce qui augmente, par le fait même, le bassin de wagons disponibles. Partant, cela permet de mieux répondre aux besoins des clients.

«L'expérience Wagon propre commence avec le groupe commercial Bois de construction, Est canadien et s'étendra possiblement à tous les groupes commerciaux, précise François Alexandre, agent de projet CSIP. Les 15 expéditeurs de bois de construction de la région ont déjà reçu la visite des représentants des Ventes et services et de Prévention des avaries et réclamations qui, en plus de leur expliquer notre programme, leur ont remis une série de sept affiches que nous leur demandons d'apposer à l'intérieur des wagons.»

Ces affiches s'adressent aux receveurs et visent à les sensibiliser à la nécessité d'enlever les débris des wagons lors du processus de déchargement. (voir page suivante)

«Chez nous, raconte Yves Lemieux, directeur de marché Bois de construction et produits du bois, ce qui a retenu notre attention c'est le fait que nous étions régulièrement en pénurie de wagons vides pour nos clients. Par l'amélioration du cycle de retour des wagons, le programme Wagon propre est autant à l'avantage du client que du CN. C'est principalement pour cette raison que nous avons décidé de participer au projet pilote.»

Sur la même longueur d'onde

Les intervenants de l'industrie ont été avisés de la démarche que le CN entendait mettre de l'avant tant au Canada qu'aux États-Unis. Que ce soit chez CSX, Norfolk Southern ou Conrail, tous ont assuré le CN de leur entière collaboration afin de promouvoir le concept de Wagon propre auprès des principaux receveurs situés sur leur réseau. Cela est d'autant plus important que la

Parmi les expéditeurs visités dans le cadre du Programme Wagon propre, la compagnie Produits forestiers Alliance. On voit ici, de g. à d., Marcel Lapierre, opérateur Produits forestiers Alliance ; Pierre Joly, coordonnateur Services à la clientèle Marketing CN ; Jack Ogilvy, directeur des ventes, Produits forestiers Alliance ; et Normand Poulin, représentant Prévention des avaries et réclamations CN lors de la mise en place d'une affiche.

majorité des expéditions de destination des États-Unis ou transigent avec le chemin de

«Nous sommes conscients du petit effort de plus aux receveurs, prévoir un espace pour les débris», dit François Alexandre. Par conséquent, nous avons eus avec eux nous convenons de l'industrie à laquelle ils appartiennent et changer leur façon de faire e



A win-win partnership

Can we serve our clients better by helping them to serve themselves better? That's the challenge for the Clean Car Program, set up under the Customer Service Improvement Program (CSIP). Better yet, the challenge is for CN to keep its costs at a reasonable level, thereby guaranteeing competitive rates for our customers.



Yves Lemieux

The idea behind the Clean Car Program is pretty basic: if each receiver cleans their cars before sending them on their way, the return cycle will automatically be cut and the pool of available cars will grow. From the outset, we'll be able to better meet our customers' needs.

"The Clean Car experiment will start with the Lumber and Wood Products group in Eastern Canada and may be extended to all of the business groups," says François Alexandre, CSIP project officer. "The region's 15 lumber shippers have already been visited by representatives from Sales and Services and from Safety and Loss Control who explained the program to them and gave them a series of seven posters to hang inside the cars."

These posters are intended to make the receivers aware of the need to remove debris from the cars when they unload them (see page 7).

"What grabbed our attention," says Yves Lemieux, Market manager - Lumber and Wood Products, "is the fact that we were regularly short of empty cars to give our customers. By improving the car return cycle, the clean car program benefits both the customer and CN. That's the main reason we decided to participate in the pilot project."

All on the same wave length

Other railroads have been informed about this project, which CN intends to implement both in Canada and the US. CSX, Norfolk Southern and Conrail have all agreed to promote the clean car concept to the principal receivers located on their systems. This is important since most ship-

ments of lumber go to the receivers deal with the railway.

"We realize that we're asking the shippers who, for example, have to deal with the debris," admits François Alexandre. "The talks with the shippers have shown they are prepared to change their way of doing things. It's a challenge for the good of their customers."

One of the shippers visited as part of the Clean Car Program was Alliance Forest Products. Present at a poster hanging (l-r): Marcel Lapierre, operator, Alliance Forest Products; Pierre Joly, coordinator - Customer Services, Sales and Services, CN; Jack Ogilvy, Sales manager, Alliance Forest Products; and Normand Poulin, representative, Prevention and Claims Services, CN.





Famille et carrière...

Il n'y a pas si longtemps, par un beau matin de printemps, ma petite cocotte de trois ans s'émerveille devant un nid rempli de trois mignons petits oisillons. Très préoccupée par le bien-être de ces petites créatures criant famine, elle me demande tout innocemment : «Où elle est la maman oiseau?» Sans attendre une réponse, elle me dit, le visage souriant : «Elle est partie au bureau!» Cette réponse tout à fait candide m'a fait réfléchir sur le façon dont se concilient famille, carrière, études et vie sociale.

J'aime beaucoup mon travail, surtout lorsqu'il me mène vers des villes jusqu'alors inconnues où on a quelquefois l'occasion de fraterniser avec les collègues et les clients autrement qu'autour d'un budget ou d'un objectif. J'aime beaucoup mon travail, surtout lorsqu'il me conduit quelquefois vers des hôtels où on n'a pas à se préoccuper de faire son lit, de préparer les repas, d'essuyer les murs de la douche et où on vous demande constamment si VOUS avez besoin de quelque chose. Mais...

Les voyages forment la jeunesse, dit l'adage. Ils ont bien formé ma fille. Oui! Elle se fout éperdument des moments de bien-être que l'on peut savourer pendant ces escapades et prend un malin plaisir à vous faire la gueule pendant trois jours afin que vous vous repentiez de votre conduite. Et que dire des conflits d'horaire avec le conjoint! C'est la course effrénée vers la bonne âme charitable d'une grand-maman ou d'une ma'tante! Et, alors que l'on croit que toutes les boucles sont bouclées, la petite se met à faire 39,5° C de fièvre et vous lance un «t'es pas fine» avant d'embarquer dans la voiture. La gorge se serre...

J'avoue très honnêtement éprouver une certaine fierté et une satisfaction personnelle face à mon cheminement de carrière qui a été rempli de défis intéressants et d'imprévus. Mais...

Il y a constamment l'usure des bancs d'école. Élargir ses connaissances par besoin ou par curiosité, c'est agréable mais ça se gâte lorsqu'il faut passer quelques nuits blanches afin de respecter les échéanciers des travaux d'école en plus des échéanciers d'objectifs stratégiques. Combien de fois me suis-je demandée si le jeu en valait la chandelle alors que je passais plus de temps avec trois coéquipiers intransigeants qu'avec ma famille. Les cheveux gris se font plus nombreux...

Et la vie sociale dans tout cela? Je peux la résumer dans un paragraphe, alors... Fini le temps de la spontanéité. La semaine, on n'a pas droit aux sorties (surtout pas le temps, les m... rapports et le m... courrier électronique!) Le vendredi soir, on mange le spaghetti chez Giorgio en famille (on nous connaît par nos petits noms!), car on ne vous déroule pas le tapis rouge pour l'apéro chez Alexandre avec des enfants. Le samedi soir, peut-être un film vidéo avec du maïs soufflé maison (si on ne s'endort pas devant la télé!), car les gardiennes de confiance se font rares. Le dimanche après-midi, la visite de routine chez les grands-parents (en espérant qu'ils vous gardent à souper!) Bref, le cocooning à son meilleur!

Les conclusions de ma réflexion? Famille, carrière, études et vie sociale ne font pas toujours bon ménage. Les attentes, la pression et le stress sont très présents. Toutefois, ce style de vie peut s'avérer tout à fait supportable si on adopte une attitude positive accompagnée d'un brin d'humour, en vivant au présent sans trop s'attarder à ce qui pourrait arriver dans le futur et en prenant le temps de regarder évoluer les trois petits oisillons dans leur nid et, surtout, en croyant fermement que le meilleur est encore à venir. Bonne année internationale de la famille!

La directrice
Développement des ressources humaines



Three nestlings

Not so long ago, on a fine spring morning, my three-year-old stopped to wonder at three nestlings. Concerned about the welfare of these hungry young creatures, she turned to me and asked, "Where's their mother?" Without waiting for me to reply, she quickly added, "She must have gone to the office!" Her candid answer to her own question caused me to reflect upon the way we all have to juggle our family, professional and social lives, along with studies.

I enjoy my work, particularly when it takes me to new cities and when I have the chance to get together with colleagues and clients other than to discuss a budget or an objective. Yes, I enjoy my work. It's nice to go to a hotel and not have to make my bed in the morning, cook meals or have to wipe down the walls after my shower. And it's a welcome relief to have people attend to my needs. However...

"Go out and see the world," they say. "You'll learn so much." Travelling certainly has educated my daughter. And how! She gives no thought whatsoever to the moments of freedom and relaxation to be enjoyed while travelling. Instead, she revels in laying a serious guilt trip on you for three days. And of course one must not forget those inevitable heated debates about schedules with one's spouse! No, freedom and relaxation translate into a frantic dash to grandma's or Aunt Gertrude's place. And just when you think that everything is ready, that you haven't forgotten anything and that you're finally ready to leave, SHE develops a fever of 39.5°C and tells you that "you're not nice." I get a lump in my throat...

I must admit that I do get a certain amount of satisfaction from my career, and I'm proud of what I've accomplished. I've taken on many interesting and sometimes unforeseen challenges. Yet...

The wear and tear of those desks at school can catch up with you. Learning new skills out of need or curiosity can be fun, but things take a turn for the worse after you stay up a few nights to get your school work in on time in addition to meeting strategic objective deadlines. Sometimes, when I find myself spending more time with three uncompromising team members than with my family, I ask myself whether it's really worth it. I seem to be getting more and more grey hair...

My social life, you ask? I can sum it up by saying "what social life?" Forget spontaneity. There are no outings during the week (no time, and those *&!\$% reports and the *&!\$% e-mail!). On Friday night, the whole family heads to Giorgio's (they know us by first name) because they sure don't roll out the red carpet chez Alexandre when you've got kids. On Saturday night, we stay home to watch a video and munch on microwave popcorn (provided we don't fall asleep in front of the TV!) because reliable baby-sitters are impossible to find. On Sunday afternoon, it's off to visit with the grandparents (hoping that they'll ask us to stay for dinner). In short, we wrote the book on cocooning!

So what am I to make of all of this? Family, career, studies and social life do not always mix that well. Expectations, pressure and stress are high. Nonetheless, this lifestyle is bearable if you adopt a positive attitude, know how to laugh, and live for the moment, without worrying too much about what might happen next. But you must also take the time to watch three little nestlings grow into adult birds and strongly believe that the best in life is yet to come. Have a great International Year of the Family. **L**

Director
Human Resources Development



It's all in the family!

Most of us are constantly juggling our professional and family lives, which considerably modifies our role in the family.

Be it in Senneterre, Lachine, Rivière-du-Loup, Varennes, Montreal or elsewhere, it is through the family that both children and adults develop, making the family the basis of our society.

To mark the International Year of the Family, The Laurentian met with various types of families to learn a bit more about them. Whether they're traditional, common-law, blended or single-parent, they're all families.

Thanks to all those who let us take a peek into their family lives.

The Cormier-Saywell family

Making adjustments to

BY JULIE GOULET

CN Real Estate senior representative Guylaine Cormier and her partner, John Saywell, live in a quiet Lachine neighbourhood, with rows of well-kept, nearly identical houses. The neighbourhood was built in the early 50s, when the Quebec family consisted of a father, a mother and children—the type of family in which Guylaine and John grew up and where, like so many others, they found love and security. Their respective children, and those they will have together, will grow up in a different type of family, more spread out in terms of distance, but with no less love or security.

"You don't decide to form a blended family like you choose a career," affirms Guylaine. "When I had Étienne, I was living with his father and never thought that my life would take a different path."

Changing direction

Four years ago, when Guylaine met John, who has a daughter, she was living alone with her three-year-old son. Rather than alienating them from each other, their children brought them even closer together. The feeling that they understood each other better, common values and the willingness to create surroundings that would be good for the children all increased their interest in each other, and, after dating for nine months, they decided to unite their destinies in a simple way, without promises or official papers.

They live in Hudson, halfway between their respective workplaces, and share the same vision: to build a family in which the children will be able to flourish while sharing the love of their parents.

After a few years of living together, Guylaine has noticed that "the non-biological parent gives of his or her love less freely to the non-biological child. I realize that I'm more critical of Naomi than of my son, but I think that has its advantages."

John shares this opinion. "It's true that it can be a bit difficult to take at first, but when you look at the situation objec-



The Cormier-Saywell family, ready for a bike trip. From left to right: Naomi, John, Guylaine and Étienne

tively, you see that the non-natural parent is more strict. As long as things don't go to extremes, they can teach the natural parent a lot about his/her own 'little darling'."

It is true that children are often the stumbling block in blended families "We often say that we chose each other, but we didn't choose each other's children, and the children didn't choose us," John points out.

Adjustments — continued on page 6

➤ S'apprivoiser

suite de la page 5

Il n'en demeure pas moins que les enfants constituent souvent la pierre d'achoppement des familles reconstituées. «On dit souvent que nous on s'est choisi mais que l'on n'a pas choisi l'enfant de l'autre et que les enfants ne nous ont pas choisis», note John.

Ils partagent le même idéal: bâtir une famille où les enfants pourront s'épanouir.

Tout le monde doit s'apprivoiser et cela demande du temps et de la patience, denrées de plus en plus rares aujourd'hui.

Pour Guylaine, par exemple, apprendre à connaître Naomi n'allait pas de soi puisqu'elle arrivait dans sa vie avec neuf ans de vécu qu'elle ignorait. «Naomi agissait parfois d'une façon que je ne comprenais pas et j'avais tendance à la blâmer pour cela alors que j'aurais dû adresser mes reproches à son père ou à sa mère.»

«C'est vrai, reconnaît John, que si Naomi avait grandi de telle façon c'est parce que nous ne l'avions pas ramenée sur une autre piste. En tant que parents, nous étions plus responsables qu'elle.»

Une place importante

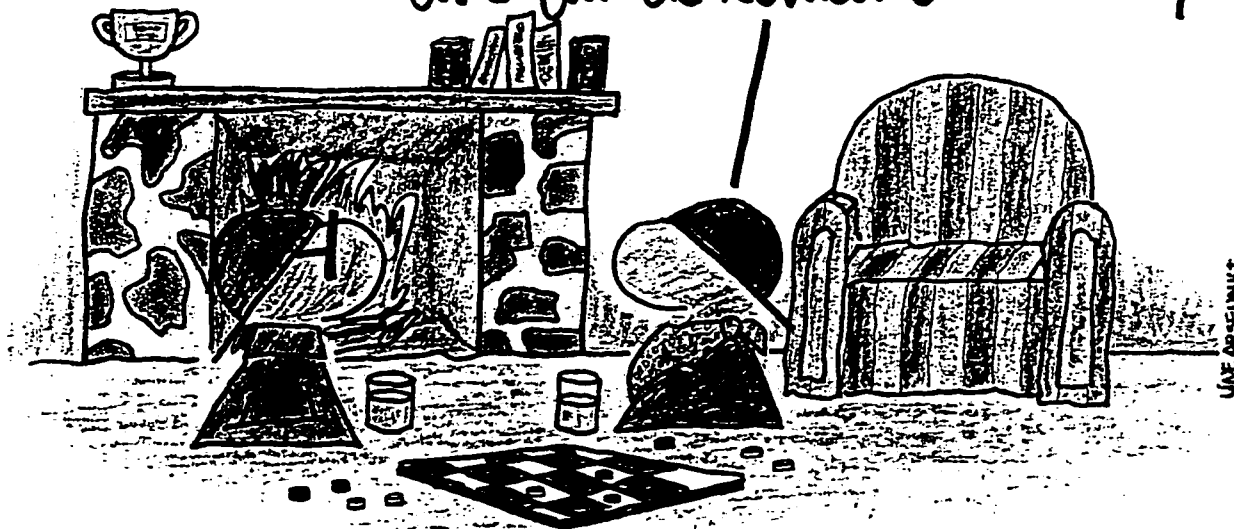
Étienne et Naomi laissent à leurs parents les débats philosophiques et les remords de conscience. Ce qui compte par-dessus tout pour les enfants, c'est de sentir qu'ils occupent une place importante autant au sein de cette famille qui, à leurs yeux, n'a rien de différent qu'auprès de l'autre parent. «Moi, raconte Étienne, je suis chanceux parce que mon père habite Montréal. Je peux le voir toutes les deux fins de semaine. Naomi, elle, c'est pas pareil. Sa mère vit à Vancouver.

Et Naomi de raconter qu'elle voit sa mère moins souvent depuis qu'elle est déménagée à l'autre bout du pays. «Je vais la voir au début de l'été. Et, fin juillet, je déménage chez elle pour trois ans. Après ça, je reviendrai habiter trois ans avec mon père. C'est sûr que je vais m'ennuyer, mais on va s'envoyer des fax et se voir à Noël ainsi qu'à d'autres occasions pendant l'année.»



La famille Cormier-Saywell dispose d'un agenda bien rempli pour coordonner les arrivées et les départs de tout le monde. Et, avec le nouveau bébé qui naîtra en septembre, celui-ci risque d'être encore plus volumineux. «Pour nous, confie Guylaine, cet enfant représente le lien de sang qui fait le pont entre Naomi et Étienne.» Un élément liant qui vient à la fois boucler la boucle et changer les règles de jeu. «Il n'y a pas de recette miracle pour réussir ce genre d'entreprise, constate-t-elle, si ce n'est l'amour que l'on éprouve l'un pour l'autre.» Un test que Guylaine et John semblent avoir réussi avec succès... L

Oui, moi aussi
j'ai mon ordinateur personnel.
Une fin de semaine sur deux.





Quelles familles!

La plupart d'entre nous tentons de concilier tant bien que mal travail et vie familiale, ce qui modifie considérablement le rôle de chacun au sein de la famille.

Quoi qu'il en soit, à Senneterre, Lachine, Rivière-du-Loup, Varennes, Montréal et partout ailleurs, la famille demeure le principal lieu d'épanouissement des enfants et des adultes, la cellule de base de la société.

Dans le cadre de l'Année internationale de la famille, Le Laurentien a rencontré différents types de famille pour rendre compte de la réalité de chacune d'elles, qu'elle soit traditionnelle, issue d'une union de fait, recomposée ou monoparentale.

Merci à tous ceux et celles qui nous ont accueillis dans leur milieu de vie; un geste qui vous honore.

La famille Cormier-Saywell

S'approprier pour mieux se reconstruire

PAR JULIE GOULET

Guyline Cormier, représentante principale Immeubles CN, et son conjoint John Saywell habitent un quartier tranquille de Lachine où de coquettes maisons presque toutes semblables s'alignent les unes à côté des autres. Un quartier bâti au début des années 1950 à l'époque où la famille québécoise était composée d'un père, d'une mère et de quelques enfants. Le type de famille au sein de laquelle Guyline et John ont grandi, où comme tant d'autres, ils ont trouvé amour et sécurité. Pour leurs enfants respectifs et celui à venir, toutefois, le modèle sera différent, plus éclaté mais sans compromis en ce qui concerne l'amour et la sécurité.

«On ne décide pas de bâtir une famille reconstituée comme on fait un choix de carrière, affirme Guyline Cormier. Lorsque j'ai eu Étienne, je vivais avec son père et j'étais à cent lieux de penser que ma vie prendrait un autre tournant.» Pourtant...

Changement de cap

Il y a quatre ans, lorsque Guyline rencontre John, qui est père d'une fille, elle vit seule avec son fils de trois ans. Loin de les éloigner l'un de l'autre l'enfant qu'ils ont chacun de leur côté les rapproche. L'impression de se comprendre davantage, les valeurs communes, la volonté de créer un cadre de vie propice aux développements des enfants, tout cela stimule leur intérêt et, après neuf mois de fréquentation, ils décident d'unir leur destinée simplement, sans grandes promesses ou papiers officiels.

En s'établissant à Hudson, à mi-chemin entre leurs emplois respectifs, ils partagent le même idéal: bâtir une famille où les enfants pourront s'épanouir tout en partageant l'amour des parents.

Après quelques années de vie commune, Guyline constate que «le deuxième parent donne moins gratuitement son amour à l'autre enfant. Je me rends bien compte que je suis plus critique face à Naomi qu'envers mon fils, mais je dirais que cela a ses bons côtés.»



Les Cormier-Saywell prêts pour une ballade en vélo. De gauche à droite: Naomi, John, Guyline et Étienne.

Avis tout à fait partagé par John: «C'est certain que cela peut être un peu difficile à prendre au début mais lorsqu'on regarde la situation froidement, on constate que le parent non naturel amène plus de rigueur dans son rôle. En autant qu'il n'y a pas d'abus ou d'exagération, cela éclaire beaucoup l'autre sur son «précieux» rejeton.»

S'approprier - suite à la page 6



Adjustments

continued from page 5

Everyone has to make some adjustments and this takes time and patience—increasingly rare qualities nowadays.

For example, it was not easy for Guylaine to get to know Naomi, since she had not shared Naomi's first nine years. "Naomi would sometimes act in a

They share the same vision: to build a family in which the children will be able to flourish.

way that I didn't understand, and I tended to blame her for it, when I should have blamed her father or mother."

"It's true," John admits, "that if Naomi grew up that way, it's because we didn't teach her otherwise. That was our responsibility as parents."

Étienne and Naomi leave the philosophical debates and regrets to their parents. What is most important to them is to feel that this family cares about them just as much as their other parents do. "I'm lucky because my father lives in Montreal," says Étienne, "I can see him every other weekend. But it's not the same for Naomi. Her mother lives in Vancouver."

Naomi says she sees her mother less often since she moved to the other end of the country. "I'm going to visit her in early summer, and at the end of July I'm going to live with her for three years. After that, I'll come back and live with my father for three years. Of course I'll miss him, but we'll send each other faxes and see each other at Christmas and other times during the year."

The Cormier-Saywell family's schedule is busy, what with coordinating everyone's arrivals and departures. And with a new baby due in September, it



may get even busier. "We feel that this child represents the blood tie that will bridge the gap between Naomi and Étienne." A link that will bring them full circle and change the rules of the game. "There's no magic recipe for success with this type of thing," Guylaine admits, "except for the love that we feel for each other." A test that Guylaine and John seem to have passed with flying colours. **L**



Cela a commencé par un coup de foudre...

PAR MARIE-CLAIRE GUGEON

En 1984, Gisèle Lauzier trouve Albert Jean, le patrouilleur du centre de ski où elle travaille, de son goût. Lui n'imagine pas qu'une fille comme Gisèle puisse le remarquer. Après l'avoir reluqué pendant près de deux ans, c'est à la fois curieuse et intéressée qu'elle décide enfin à l'inviter au mariage de sa soeur. Albert s'empresse d'accepter ne sachant pas qu'il vient de s'engager dans une relation qui changera sa vie.

À partir de ce moment, Albert et Gisèle établissent les fondements de leur prochaine union. Ils ont eu une enfance heureuse, ils tiennent à leurs principes religieux et ils sont près de leurs parents.

Ils désirent ardemment perpétuer le modèle mais à une seule différence près: leur famille à eux ne comptera que deux enfants contrairement à celles de leurs parents qui en comprenaient plus de dix dans chaque cas.

Lorsqu'ils se comparent avec leurs parents, Albert et Gisèle évoquent certaines raisons qui leur font croire que la famille d'aujourd'hui est en crise: un taux de divorce élevé, l'instabilité de l'unité familiale, les difficultés financières, la détérioration des valeurs au sein de la société, la violence, le crime et le chômage. Or, en dépit de ce constat, leur situation personnelle atteint presque le bonheur parfait.

Comme convenu au début, ils ont eu deux enfants, Marco, l'aîné qui a quatre

ans aujourd'hui, et le cadet Pierre-Luc, qui a dix-huit mois. Les deux garçons ont la chance d'avoir leur maman avec eux à temps complet. Gisèle estime en effet que le confort économique des familles à double salaire ne réussit pas à combler l'absence des parents auprès de leurs enfants. Elle nous confie: «La famille traditionnelle a été vigoureusement attaquée mais on n'a pas trouvé de solution plus appropriée pour l'éducation des enfants. On a deux enfants et on va tenter de leur donner la meilleure éducation possible, de les emmener jusqu'à l'université, s'ils le veulent.»

Quant à Albert, il transmet l'héritage religieux aux enfants. Pour lui, la religion fait partie des valeurs profondes de la famille. «On a davantage besoin de bons

Ils ont eu une enfance heureuse, ils tiennent à leurs principes religieux et ils sont près de leurs parents. Ils désirent ardemment perpétuer le modèle.

parents, pas nécessairement à l'intérieur de familles traditionnelles; ce qui est important, ce sont des parents qui s'aiment et qui sont responsables, des parents qui éduquent, qui partagent des valeurs avec leurs enfants.»

«Ma femme et moi sommes en faveur de la famille traditionnelle, mais il faut reconnaître que de plus en plus de gens choisissent d'autres types de famille.» Il conclut en disant qu'il cherche depuis toujours à adopter des attitudes de tolérance et de respect avec les autres et surtout avec sa conjointe. Selon lui, ces valeurs qui préconisent l'égalité des personnes sont essentielles à l'évolution du couple et de la famille.

C'est un peu à regret que, sereine, j'ai quitté cette famille accueillante. L

Un héritage à transmettre, celui de la famille traditionnelle... Dans l'ordre habituel: Gisèle, Marco, Albert et Pierre-Luc.



Head over heels in love

BY MARIE-CLAIRE GOUGEON

It was in 1984 that Gisèle Lauzier first laid eyes on Albert Jean, a member of the ski patrol where she worked, and she was instantly attracted to him. He couldn't even imagine that someone like Gisèle could be interested in him. After watching him from a distance for the better part of two years, Gisèle finally got up the nerve to ask him to accompany her to her sister's wedding. Albert willingly accepted, unaware that he had just begun a relationship that would change his life.

Albert and Gisèle immediately began laying the foundations for their future together. They had both had happy childhoods, have strong religious convictions and are close to their parents. They hope to re-create the same type of

life for their children with one difference: they only plan on having two children whereas both of them come from families of more than ten.

When they compare themselves to their parents, Albert and Gisèle offer several reasons to explain why they believe today's family is in trouble: a high divorce rate, instability of the family as a unit, financial difficulties, deterioration of social values, violence, crime and unemployment. But in spite of the many problems plaguing society, their personal situation could almost be called a picture of perfect happiness.

As agreed at the beginning, the couple have two children, Marco, four-years-old, and Pierre-Luc, 18 months. Both boys have had the privilege of having their mother at home with them all the time. Gisèle believes that the economic

comfort afforded double-income families does not make up for the absence of both parents from their children's lives. "The traditional family has been attacked but we have not come up with a better way of educating children. We have two children, and we are trying to give them the best education possible, including a university education if that's what they want."

Albert, for his part, passes on his religious beliefs to his children. For him, religion is one of the fundamental values of the family. "We need good parents, and not necessarily within traditional families. What's important is that the parents love each other, that they be responsible, that they educate their children and that they pass on their values to their children."

They both had happy childhoods, have strong religious convictions and are close to their parents. They hope to re-create the same type of life for their children.

"My wife and I are in favour of the traditional family, but we have to recognize that more and more people are choosing alternate types of families." He closes by adding that he is always seeking to develop tolerance and respect for others, especially for his spouse. In his opinion, equality is essential to the development of both the couple and the family. **L**



A heritage to share... the traditional family. In the usual order: Gisèle, Marco, Albert and Pierre-Luc.

Lysanne Quenneville

La superwoman change de modèle

PAR JULIE GOULET

Il peut être tentant de vouloir jouer à la superwoman, celle dont la réussite passe par l'organisation et la planification. Un modèle pour bien des femmes, une source de déception pour celles qui, comme Lysanne Quenneville, aide de triage, n'arrivent pas facilement à tout concilier.

«Lorsque j'étais enceinte de mon fils, je croyais que tout se ferait naturellement, que j'arriverais à organiser ma vie de façon à réussir ma carrière et ma relation avec Yoan. Ce n'est malheureusement pas le cas présentement, et j'essaie tant bien que mal de l'accepter.»

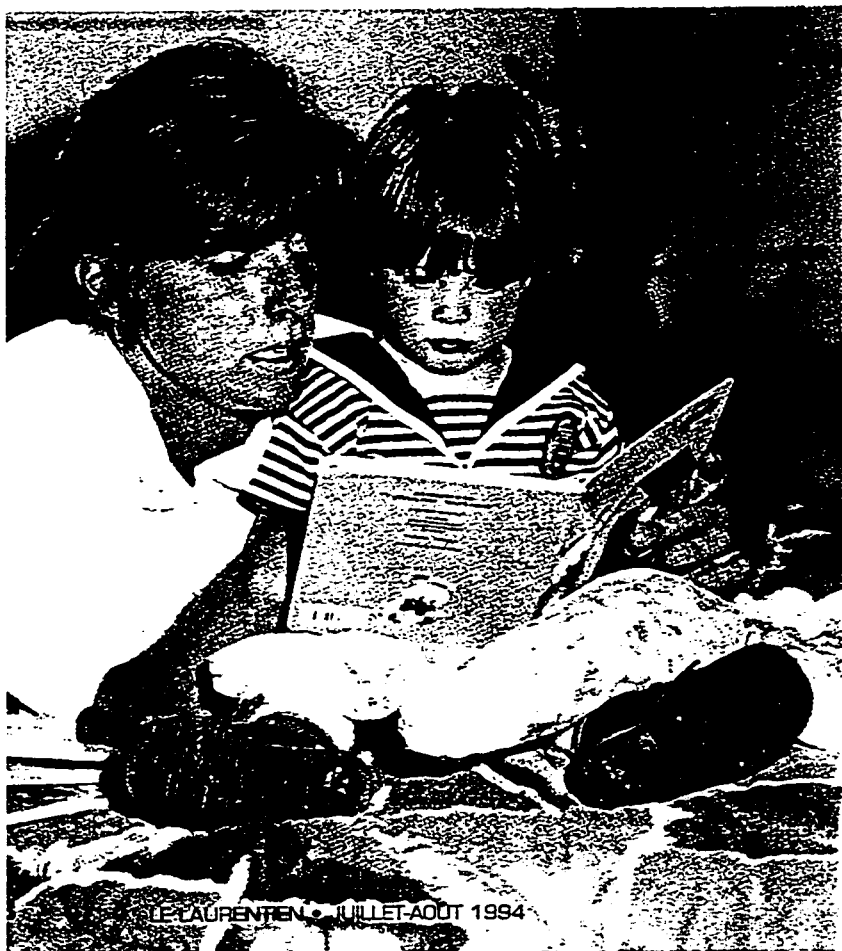
Un difficile retour

Manque de préparation au retour au travail, difficulté à trouver une gardienne qui s'occupe de son enfant de 21 h à 12 h, fatigue accumulée pendant le congé de maternité; bref, en retournant au CN, Lysanne réalise qu'elle ne reprend pas le train là où elle l'avait laissé treize mois plus tôt. Vraisemblablement, Yoan a bouleversé son existence à son insu.

«Avec le recul, je constate que je n'étais pas réaliste, reconnaît-elle. Vouloir élever un enfant seule en travaillant de nuit ou sur appel, ce n'est pas facile, encore moins si tu hésites à demander de l'aide à temps. Un moment donné, tu deviens complètement épuisée et la moindre peccadille te semble une montagne.»

Décrocher le téléphone et rester à la maison peut alors sembler la meilleure solution pour recharger les batteries et repartir

Lysanne Quenneville et son fils Yoan. Le plaisir de lire et d'apprendre...



à zéro mais, comme l'a constaté Lysanne, après quelque temps, cette attitude ne fait qu'augmenter l'angoisse, les craintes face au travail et la relation entre la mère et le fils. «Je me rendais bien compte que de m'isoler à la maison n'arrangeait rien, explique-t-elle, mais je n'arrivais pas à trouver le courage de retourner au travail. Heureusement qu'un jour une collègue est venue me brasser la cage et me convaincre que je devais faire quelque chose pour m'en sortir.»

Petit à petit, au contact des professionnels qu'elle rencontre par l'entremise du PAP, Lysanne recouvre le chemin de l'équilibre et laisse tomber le rôle de la superwoman qu'elle s'était imposé. L'heure est maintenant à la réflexion sur le genre de vie qu'elle veut mener autant pour elle que pour son fils de 18 mois à qui elle veut donner le meilleur d'elle-même et davantage si c'était possible.

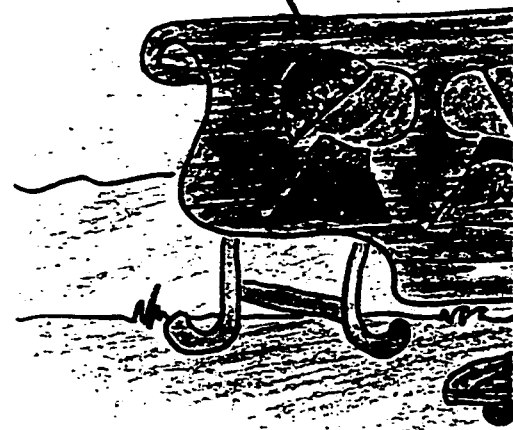
«J'ai une grosse boule dans la gorge à l'idée de quitter le CN mais je crois que, dans le contexte actuel, je ne peux réconcilier le travail d'aide de triage avec mes obligations familiales, reconnaît-elle. Il n'y a pas de honte à cela. Il faut maintenant que je reparte à neuf avec un emploi qui correspond à mon mode de vie actuel.»

À 31 ans, tout est encore possible en autant que l'on se donne la peine de chercher, ce que Lysanne entend faire pendant l'été. Son premier défi: aller chercher une formation qui lui donnera les outils nécessaires pour trouver un travail qu'elle aime et qui lui permettra d'assurer un avenir décent à son fils.

Tout le reste est secondaire pour le moment, même si elle n'écarte pas la possibilité qu'un homme puisse éventuellement partager sa vie et qu'un père puisse se glisser dans celle de son fils. «Un homme et une femme ne réagissent pas de la même manière et j'aimerais bien que Yoan ait un modèle masculin auquel s'identifier.»

Partager la responsabilité de l'éducation de l'enfant, les joies et les peines du quotidien, les angoisses face à l'avenir, tout ce qui compose la vie en quelque sorte lui plairait probablement lorsqu'elle aura fait le point sur sa vie... **L**

Chez-moi
C'est une famille
reconstituée.



Lysanne Quenneville

Trading superwoman in for a new model

BY JULIE GOULET

It's really tempting to try to do everything, to succeed through organization and planning. Although the superwoman model is the ultimate goal for many women, it's a source of despair for others who, like Lysanne Quenneville, yard helper, find it hard to reconcile everything.

"When I was pregnant with my son, I thought that everything would just come together on its own, that I would be able to organize my life so that I could pursue my career and develop my relationship with Yoan. Unfortunately, that's not what's happening, and I'm still trying to come to terms with it."

Unprepared for her return to work, finding it hard to find a baby-sitter who could care for her son from 9:00 P.M. to 12:00 noon, still worn out from her maternity leave, Lysanne came back to work at CN only to realize that she could no longer keep up the gruelling schedule she had before leaving 13 months earlier. Without her realizing it, Yoan had changed her entire life.

"Looking back, I can see that I wasn't realistic," she admits. "It's hard to raise a child alone while working nights or on call, even more so if you're leery about asking for help. It gets to the point where you're completely exhausted and the least little problem looks insurmountable."

Taking the phone off the hook and staying at home may look like the best way to recharge your batteries and start over again but, as Lysanne found, an attitude like that merely increases your stress, and your fears about your work, and your

relationship with your child. "I realized that staying at home alone didn't fix anything," she explains, "But I just couldn't face going back to work. Fortunately, a co-worker came over to shake me up one day and convince me that I should do something to change my situation."

Little by little, with help from the professionals she met through the EAP, Lysanne found some balance and gave up trying to be superwoman. Now, she's thinking about the kind of life she wants for both herself and her 18-month-old son. It's important for her to be able to give him as much of herself as possible.

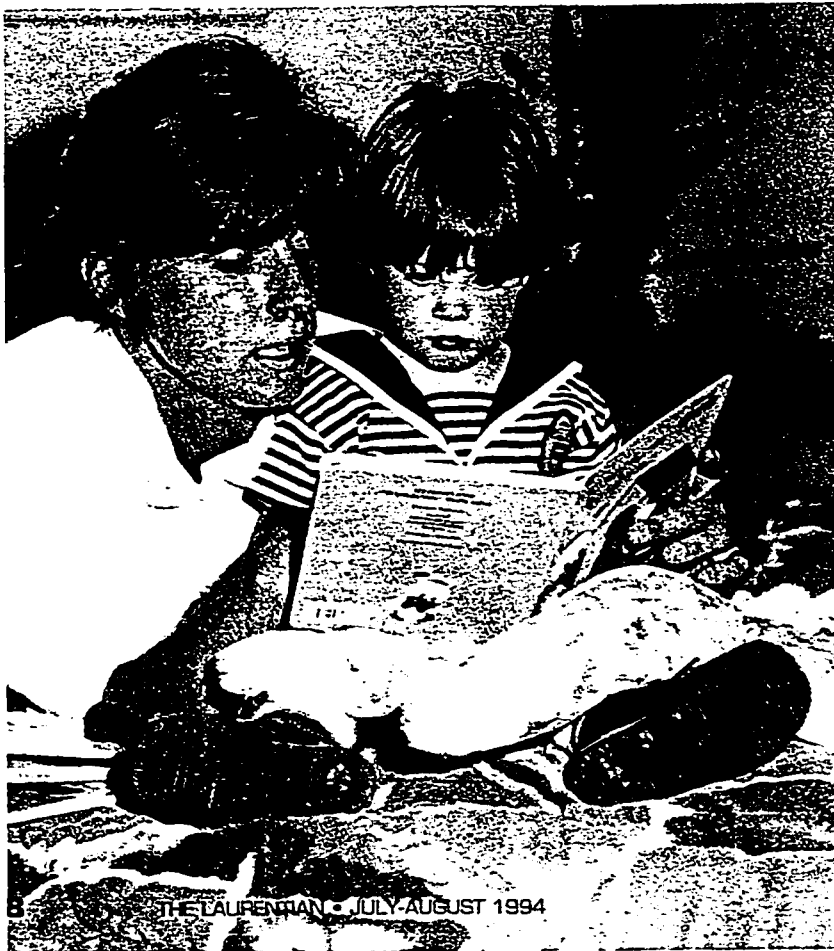
"It brings tears to my eyes when I think about leaving CN but, given the situation, I can't juggle both my duties as a yard helper and my family obligations," she admits. "And I've nothing to be ashamed of. I have to start over again, with work that suits my present lifestyle."

At 31 years of age, you can do anything as long as you take the time to find out what you want, which Lysanne intends to do over the summer. Her first challenge: to get the training she needs to find work which she will enjoy and which will enable her to provide a decent future for her son.

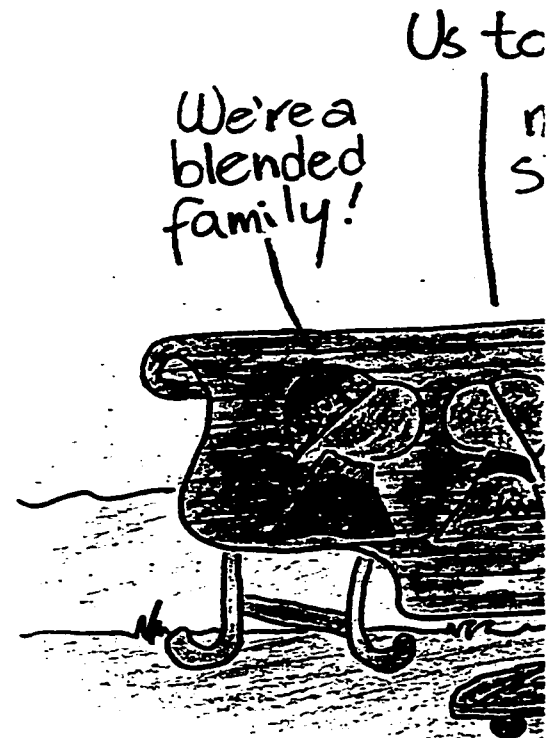
Everything else is secondary right now, although she hasn't ruled out the possibility of eventually finding someone to share her life with and be a father to her son. "Men and women don't react the same way, and I would like Yoan to have a male model."

Once she's decided where she's heading, Lysanne will most likely want someone to help her raise her child, to share the daily joys and pains, the good times and the hard times. In short, everything that makes up daily life... L

Lysanne Quenneville and her son Yoan enjoying the pleasure of reading.



THE LAURENTIAN • JULY-AUGUST 1994



Un clan tricoté serré...

PAR MARIE-CLAIRE GUGEON

Is sont cinq et ils ont appris à se serrer les coudes au fil des bonnes et des moins bonnes années. Au début, Jean Mignacco et Ginette Gallant se sont installés ensemble mais, peu après, ils se sont mariés en bonne et due forme pour le meilleur et pour le pire. Après quinze ans, c'est toujours pour le meilleur... Jonathan, qui a douze ans, s'est joint au couple en premier. Ensuite, la cellule familiale s'est agrandie pour accueillir Nicolas, 9 ans. Puis, elle s'est complétée avec Maxine, âgée de six ans.

Jean avoue : « La famille pour moi, c'est ce qui compte le plus dans ma vie... c'est ma priorité... avant je prenais l'ouvrage plus à cœur que ma famille... j'avais plus d'ambitions pour ma job que la famille. Cependant, depuis l'accident, j'ai révisé mes positions. Maintenant, je consacre plus de temps à ma famille et je ne néglige pas mon travail pour autant. »

Au moment de l'entrevue, il y a plus de deux ans que Jean Mignacco est coordonnateur de trains au service du Transport pour le territoire de Senneterre. C'est durant cette période que lui et sa famille ont été impliqués dans le malheureux accident de voiture auquel il fait référence.

Depuis cet accident qui a bouleversé leur vie, Jean n'a jamais remis à plus tard les choses importantes. Ces choses, c'est une excursion réclamée par l'aîné, sa présence requise à un match sportif ou encore une sortie en famille. Désormais, aussitôt promis, aussitôt fait. « On est tellement fragile, on ne sait pas où on sera demain surtout quand on a failli y rester... » dit-il. C'est aussi pourquoi, il ne laisse passer aucune occasion de dire aux enfants combien il les aime. Pour lui, il est primordial de communiquer ses émotions et ses sentiments. Et cela se passe au souper autour de la table.

Tous en profitent pour se parler à cœur ouvert et les enfants sont les premiers au rendez-vous de ce rituel sacré.

Une famille traditionnelle

Jean et Ginette, qui forment une famille traditionnelle où l'un travaille au foyer et l'autre à l'extérieur, croient de façon générale que ce modèle constitue la meilleure formule pour élever des enfants. Cependant, leur dynamique de



Un clan tricoté serré. De gauche à droite: Ginette, Maxine, Jonathan, Jean et Nicolas.

groupe n'est certes pas si traditionnelle. En effet, les rôles des membres de la famille se sont modifiés considérablement selon les circonstances de la vie. Par exemple, il est arrivé à Ginette de se retrouver seule pendant plusieurs mois, et ce, à la naissance de Maxine, parce que la carrière de Jean l'amenait loin des siens. Il va sans dire que le travail les a obligés à des sacrifices mais ces privations ont quand même contribué à tricoté les liens du couple. Aussi, pendant le séjour de Jean à l'hôpital, c'est l'aîné Jonathan qui l'a remplacé auprès de son frère et de sa soeur. En l'absence du père, l'homme de la maison, c'était lui!

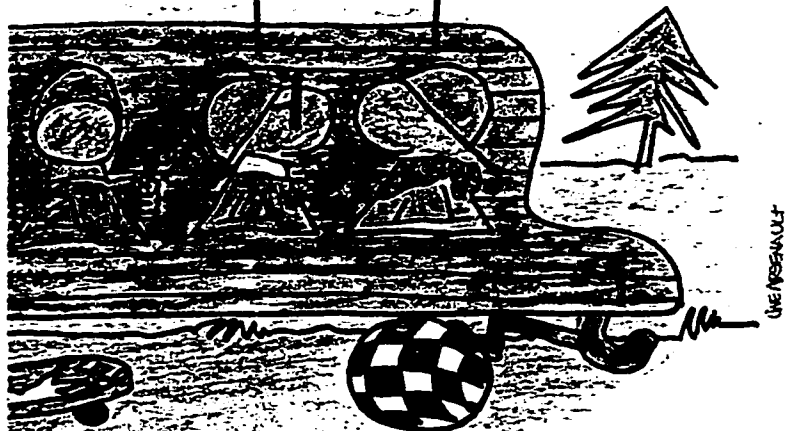
Bon gré mal gré, les Mignacco s'adaptent aux changements. D'ailleurs, Ginette veut réintégrer le marché du travail prochainement dès que ses études du soir seront terminées. Ce projet coïncide avec l'entrée à l'école de Maxine, cet automne. De son côté, Jean commence sous peu de nouvelles fonctions à Montréal. La famille suivra pour mieux entamer la suite, prête à tourner la page sur un chapitre mouvementé de son histoire et déterminée à relever de nouveaux défis. « Nos enfants sont notre source de motivation, conclut-il. On les aime et on fait tout pour eux... » Paroles de sage. L

2 aussi.

oi c'est
noparental.

Et toi?

Stéréoparental.



The Mignaccos

A close-knit family

BY MARIE-CLAIRE GUGEON

This family of five has learned to pull together in good times and bad. Jean Mignacco and Ginette Gallant moved in together first, but shortly afterwards they were legally married, for better or for worse. Now, 15 years later, it's still for better. Twelve-year-old Jonathan was their first child. Then came Nicolas, nine years old, followed by Maxine, six.

Jean admits, "The family is the most important thing in my life... it's my priority... before, I put work ahead of my family... I had more hopes and dreams for my career than for my family; but since the accident, I've come to see things differently. Now I devote more time to my family, but without neglecting my work."

When we interviewed Jean Mignacco, he had been working as Train Service Manager in the Transportation Department on the Senneterre territory for more than two years. It was during this time there that he and his family were involved in the unfortunate car accident to which he referred.

Since the accident, which turned their lives upside down, Jean has never put off important things, like taking a trip with his eldest son, attending a

sports event in which one of his children is participating or going on a family outing. Now he always keeps his promises. "We're so fragile, we don't know where we'll be tomorrow, especially since we barely survived that accident," he affirms. This is also why he never passes up an opportunity to tell his children how much he loves them. He feels that it is crucial to share what you are thinking and feeling, and this is done around the dinner table. Everyone takes advantage of this opportunity to speak openly, and the children are the first to participate in this special family custom.

A traditional family

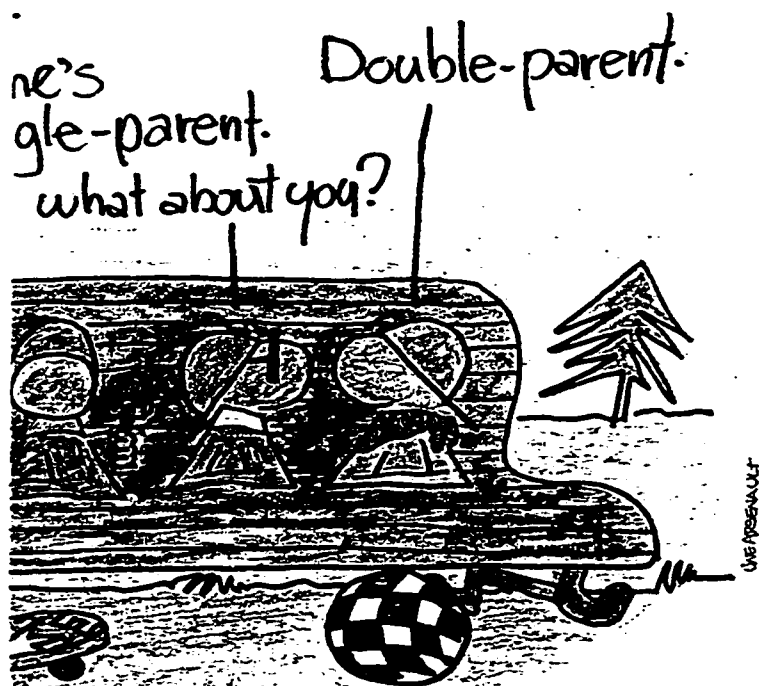
Jean and Ginette have formed a traditional family unit in which one person works in the home and the other outside the home. They believe that, in general, this is the best way to raise children. However, their group dynamics are certainly not that traditional. In fact, the



The close-knit clan. From left to right: Ginette, Maxine, Jonathan, Jean et Nicolas

roles that family members play have changed considerably as circumstances changed. For example, Ginette looked after things by herself for several months when Maxine was born, because Jean's career took him out of town. Of course, work has forced them to make sacrifices but these have helped to draw Jean and Ginette closer together as a couple. In addition, while Jean was in the hospital, the eldest son, Jonathan, acted as a father-figure to his brother and sister. While their father was gone, he was the man of the house!

Whether they like it or not, the Mignaccos are adapting to change. Ginette wants to go back to work soon, once she has finished her evening courses and Maxine starts school this fall. Jean will soon begin a new job in Montreal. The family will go with him, ready to make a fresh start and to close the book on a turbulent chapter in its history, and determined to meet new challenges. "Our children are our inspiration," Jean concludes. "We love them and would do anything for them." Wise words, indeed. **L**



La famille Desjardins

Entre le travail et les enfants, du bonheur organisé...

PAR JEAN-CHARLES NEAULT

Vanessa par une belle journée d'été. Paisible quartier, rue tranquille. Voilà la maison à droite. Il est 9 h. Le déjeuner terminé, Vanessa âgée de sept ans, deuxième année complétée, attrache à la queue leu leu les lettres ph dans son cahier d'exercices. Bientôt, les mots écrits de sa main révéleront le fil de sa pensée. À ses côtés, Valérie, sa cadette de deux ans, piaffe d'impatience d'entrer elle aussi à l'école pour suivre les traces de sa sœur aînée.

«Ces deux-là sont complices, parlent beaucoup entre elles, s'amusent ensemble. J'en suis ravie. Cet amour-là, on le transmet aux enfants», d'avouer leur mère.



Des lettres attachées à la queue leu leu...

Leur mère, c'est Lina Vendrame. Âgée de trente-six ans, italienne, sportive, Lina occupe un poste d'infirmière à temps partiel et joue le rôle de mère de famille à temps plein. À la naissance de ses enfants, elle a quitté le travail permanent pour consacrer le plus de temps possible aux siens. «La famille, c'est notre priorité. Les activités, nous les vivons à quatre», dit-elle. Au programme: pique-nique, promenade, baignade, cinéma (la veille, ils avaient vu *Les Pierrafeu*), le ski et le patinage.

Simple ironie? Lina a l'allure d'une Québécoise autant que son chum québécois ressemble à un Italien. Ce dernier, c'est Normand Desjardins, inspecteur au

Service de la Police CN. Physique imposant, moustache lissée sur un teint bronzé, il complète le tableau familial.

Après avoir passé deux heures en compagnie de la famille Desjardins, je découvre que l'activité fébrile qui règne au foyer nécessite de l'organisation, beaucoup de passion, de tradition et une montre suisse pour gérer temps, stress, famille, travail et loisirs.

Le couple s'est formé alors qu'ils étudiaient au Cégep de Maisonneuve. Elle, en technique infirmière; lui, en technique policière. Après six années de fréquentation, il se sont mariés il y a dix ans.

Et aujourd'hui, le couple transcode: Lina, par les traditions familiales, Normand, par son sens de l'organisation. Pas étonnant que les enfants soient bien encadrés, que la vie des Desjardins soit réglée au rythme du temps compté et du stress dompté... Le calme plat? Oh que non! Des valeurs à transmettre? Oh que si!

«Dix fois par jour nous disons à nos enfants que nous les aimons. Ils le savent. Je ne peux me coucher sans aller les embrasser, les cajoler, les couvrir. Nous leur communiquons le respect d'autrui — l'une des valeurs oubliées aujourd'hui —, le respect des parents, le respect de leur vie personnelle et le sens des valeurs... à partir du principe suivant: tu n'obtiens rien si tu fais rien. Déjà, les enfants accomplissent des petites tâches pour lesquelles elles sont rémunérées: deux dollars par semaine pour desservir la table par exemple. «Nous leur transmettons des valeurs d'autrefois, qui se sont perdues entre deux générations, comme apprendre à gagner sa vie. Je vois trop d'enfants qui n'ont aucun sens des valeurs», confie Normand.

De son côté, Lina qui avoue avoir été éduquée sévèrement («J'en suis contente», dit-elle), a bien retenu la leçon: «Quand à neuf heures du soir des enfants, dont les devoirs n'ont pas été faits, viennent sonner à la porte pour jouer avec nos filles, nous refusons.

«En étant près d'elles, en leur parlant comme à des amies, elles apprennent à se confier et, à partir de là, on



La famille Desjardins, de gauche à droite: Lina, Vanessa, Valérie et Normand.

peut assurer un suivi. Il faut les guider dans les expériences qu'elles vont vivre en leur faisant part des nôtres. Mais elles seront libres de faire ce qu'elles veulent. Pour nous, il s'agit de donner le meilleur de nous-mêmes... et de faire confiance», dit-elle.

Après les enfants

Une fois par mois, le couple fait garder Vanessa et Valérie. Deux fois par année, c'est pour un week-end d'évasion dans un centre de thalassothérapie.

Et quand Lina travaille (une fin de semaine sur deux), Normand prend la relève. «J'adore revenir à la maison et me faire servir. Normand excelle en cuisine», dit-elle. Sa spécialité: émincé de veau à la crème accompagné d'un bon vin.

Souvent aussi, le couple reçoit. «Les enfants couchés, on sort les chandelles et on se fait un bon repas entre amis», indique Normand.

Est-ce possible qu'il reste du temps? Oui! Lina fait du conditionnement physique et de la danse aérobique. De son côté, Normand et un confrère de travail animent des soirées avec une disco mobile. Normand s'occupe de la musique et son associé de l'animation.

Tard le soir, quand la famille Desjardins s'endort paisiblement... Normand s'installe devant une toile, sort les pinceaux et s'évade. «Je m'isole pendant des heures. La peinture me permet de tout oublier, de faire le vide. Je quitte le monde réel et pénètre dans une autre dimension. C'est exaltant!», dit-il.

L'entretien terminé, calepin fermé, il fallait quitter. Je ne sais pourquoi, mais Normand a lancé le mot «golf» dans la conversation.

J'ai entendu un faible grognement, cela ressemblait à la voix de Lina... **L**

The Desjardins

Work and family - what more could you want?

BY JEAN-CHARLES NEAULT

A beautiful summer day in Varennes. A peaceful neighbourhood. A nice, quiet street. The house on the right. It's nine in the morning. Breakfast is over and seven-year-old Vanessa, just out of Grade 2, is writing in her notebook. At her side, five-year-old Valérie, fidgeting impatiently, can hardly wait to join her older sister at school.

"Those two are real buddies. They talk a lot together, they play together. I think it's great. That's the love we've been able to give them," says their mother.

That's Lina Vendrame. Thirty-six years old, of Italian origin, athletic, Lina



Practice makes perfect!

works part-time as a nurse and full-time as a mother. When her children were born, she gave up full-time work outside the home to be able to devote as much time to them as possible. "Our family is our priority. All four of us work and play together," she says. On the program: picnics, strolls, swimming, movies (they just saw the Flintstones the night before), skiing and skating.

Oddly enough, Lina looks like the Quebecer while her husband looks like the Italian. He's Normand Desjardins, a CN police inspector. Tall, dark-skinned, with a sleek mustache, he completes the family portrait.

After spending a couple of hours with the Desjardins family, I realized that the household's many activities require organization, passion and tradition. Moreover, it takes a Swiss watch to manage time, stress, family, work and pleasure.

The couple met when they were studying at Cegep de Maisonneuve: Lina to be a nurse and Normand to be a police officer. Ten years ago, after dating for six years, they got married.

And today, the family is really working out—as a result of Lina's love of family traditions and Normand's sense of organization. It's not surprising that the children are well-adjusted, that the Desjardins clan leads a full and stress-free life. Boring? No way. Full of important values? Yes!

"Ten times a day we tell our children we love them. They know it. I can't go to bed without kissing them, caressing them, tucking them in. We teach them to respect others, and that's a forgotten value today. We teach them respect for their parents, for themselves, and we give them a sense of values. We've adopted the principle that you don't get something for nothing. Already, the girls get an allowance for doing a few small chores around the house. For example, they get \$2.00 per week for cleaning off the table. We're trying to give them some good old-fashioned values, which have been lost over the last couple of generations, such as working for their living. I've seen too many kids who don't have any values," says Normand.

For her part, Lina admits that she was raised very strictly and she's glad about it. "At 9:00 in the evening, when kids who haven't done their homework yet come by to play with the girls, we refuse."

"By being close to the girls and talking to them like friends, we teach them to confide in us and this helps us keep in touch. We have to guide them through their experiences by sharing our experiences with them. But they're always free to do what they want. It's important for both of us to give our best... and to trust them," she says.



The Desjardins family—from left to right: Lina, Vanessa, Valérie and Normand

After the children

Once a month, the couple leave Vanessa and Valérie with a baby-sitter. Twice a year, they get away for a weekend at a thalassotherapy centre.

And when Lina works (every other weekend), Normand takes charge. "I love coming home and being served. Normand is an excellent cook," she says. His specialty: thinly sliced veal in cream sauce with a good bottle of wine.

The couple frequently entertains as well. "Once the children are in bed, we get out the candles and have a nice meal with friends," says Normand.

Do they have any spare time? Yes! Lina works out and does aerobics. Normand and a co-worker operate a discomobile; Normand takes care of the music while his friend emcees.

Late at night, while the Desjardins family is peacefully sleeping, Normand gets out his canvasses and brushes and escapes. "I can stay alone for hours. Painting lets me forget everything, put it all behind me. I leave the real world and go into another dimension. It's incredible!" he exclaims.

It's the end of the interview and I have to close my notebook and leave. I don't know why, but Normand suddenly said something about "golf."

I heard a low growl; somehow, it sounded a bit like Lina... L



Pierre Boucher

Un coach positif

Non! Je ne suis pas Jacques Demers. Je travaille plutôt au CN depuis 25 ans et j'occupe actuellement le poste de superviseur Matériel remorqué au triage Taschereau. Sous les ordres de François Galarneau, surintendant terminal, je supervise environ 40 wagonniers en temps normal et près de 60 personnes lors du remplacement de mes confrères en vacances.

Non! Je ne suis pas Jacques Demers, mais mon travail ressemble à celui d'un coach de hockey. S'il ne donne pas de glace à son joueur, il ne pourra pas compter de but. C'est la même chose ici. Il faut donner à son personnel tous les «outils» dont il a besoin pour qu'il puisse produire: les objectifs de l'atelier à atteindre par la responsabilisation de chaque personne, des rencontres en groupe mais aussi par petits groupes afin de répondre aux demandes de mon personnel, pour informer, comprendre, expliquer... les économies qu'on réalise si, par exemple, on diminue le nombre de wagons défectueux, etc. Et ceci n'inclut pas le «shop talking» et le briefing pour débiter la journée.

Mais aussi, d'autres rencontres pour leur dire que je suis fier d'eux ou pour souligner de façon particulière le rendement d'une personne ou d'un groupe qui a fait un travail hors de l'ordinaire (en utilisant le système D), lors d'un imprévu, afin de satisfaire aux besoins d'un client. Avant, on se contentait d'une poignée de main. Aujourd'hui, on ajoute un p'tit quelque chose qui fait plaisir...

Pour arriver à ses fins, il faut communiquer, installer un climat de confiance et travailler tous dans la même direction. Il faut aussi être disponible, honnête et savoir bâtir ses équipes de travail pour en tirer le meilleur parti possible. Rien au hasard. Comme le coach choisit ses lignes d'attaques, un employé qui performe peut entraîner avec lui un autre qui est moins motivé, par exemple.

Le superviseur, c'est un coach. Mais un coach, c'est aussi un psychologue, un médecin, un professeur. Tout ça ensemble. Quand je me présente au travail à 7 h le matin, j'ai devant moi 40 caractères différents. Eux n'en voient qu'un seul: le mien. Et je dois m'adapter. Et ce, sans compter les problèmes personnels de toutes sortes qui peuvent survenir: le gars en difficulté financière, le «bougonneux» qui arrive frustré de ne pas avoir fait l'amour la veille ou préoccupé parce que son garçon est rentré à 3 heures du matin. Avant même que la journée commence; il faut «dealer» avec ça. C'est assez délicat...

Et, c'est sans oublier les rumeurs au travail. Elles sont mortelles; elles tuent le moral des employés. Il ne faut surtout pas embarquer dans ce jeu. Une solution? La seule qui existe: c'est de dire la vérité. Quand l'employé vient te voir et te demande: «Hé, c'est vrai?» Il faut être vraiment honnête et lui dire exactement ce que tu connais. Si je n'ai pas la réponse, je lui dis que je ne l'ai pas. Il faut donner l'heure juste. Et quand j'ai la réponse officielle, je leur confirme rapidement la nouvelle et leur dit que le reste n'est que rumeur.

De nos jours, le changement, on le vit. Tenez, par exemple, les échelons hiérarchiques. Avant, il y avait un contremaître d'atelier, un contremaître adjoint du surintendant et le surintendant. Les messages qui partaient de la haute direction se perdaient bien souvent avant d'arriver à mon niveau. Aujourd'hui, deux échelons sont disparus. La communication est directe, franche et elle se rend à mon niveau puis à mon personnel. C'est Marc Laliberté, le surintendant, qui nous donne la marche à suivre. À mon tour, j'ai plus de facilité à donner l'information à mon personnel parce que je suis mieux informé.

Elle circule beaucoup plus aujourd'hui l'information et elle va circuler encore plus bientôt parce qu'il a été décidé d'ajouter une réunion mensuelle par groupe de dix... question d'améliorer le travail et de faire mieux, encore mieux. Sans relâche...

C'est comme ça qu'on va y arriver. Pour Jacques Demers, le but, c'est la victoire. Pour nous, c'est la survie.

Superviseur, premier niveau
Triage Taschereau



First Name Supervisor
Last Name Supervisor

La réadaptation au travail

Faire aussi bien autrement...

PAR JULIE GOULET

Au CN, tous les jours, des gens se blessent en travaillant. Parfois il s'agit d'une simple égratignure ou d'une coupure qu'il suffira de nettoyer et de panser pour que l'employé reprenne son travail là où il l'avait laissé. D'autres fois, l'accident sera beaucoup plus grave. Il viendra de façon soudaine bouleverser la vie de l'employé et de sa famille au point où celui-ci ne sait plus s'il pourra un jour reprendre le travail.



La réadaptation au travail représente un véritable défi pour Nicole Trudel-Marion. «La réadaptation est un domaine complexe où chaque cas exige une attention particulière.»

Ceux et celles qui ont connu un accident de travail savent combien il est déroutant de se retrouver à l'hôpital du jour au lendemain sans savoir comment on va s'en tirer. Qui va payer l'hypothèque et les autres comptes pendant la période de convalescence? Quand la situation reviendra-t-elle à la normale? Et une foule d'autres questions tout aussi inquiétantes.

«Personne n'est préparé à la venue d'un accident et c'est bien normal de se sentir démuné quand cela nous arrive», souligne Nicole Trudel-Marion, agente de réadaptation aux Réclamations générales. Une fois le choc de l'accident passé, l'employé traverse une période d'incertitude qui s'atténue au fur et à mesure que son état de santé s'améliore et que les paiements que la Commission de la santé et de la sécurité du travail (CSST) doit lui verser jusqu'à son retour au travail lui parviennent régulièrement», précise-t-elle. (Voir le tableau récapitulatif.)

En effet, pendant la période de consolidation, c'est-à-dire jusqu'à ce que l'état de santé de la personne se stabilise, l'employé recevra 90 p. 100 de son salaire par le biais de la CSST qui prend aussi en charge toutes les dépenses reliées à la santé du travailleur et à son retour au travail. Il peut s'agir de frais d'hospitalisation, de prothèses orthopédiques, de recyclage pouvant faciliter le retour au travail, etc. À son tour, la CSST fera parvenir mensuellement un état de compte au CN qui, en tant qu'employeur tenu personnellement aux prestations, doit rembourser toutes les factures relatives à un dossier d'accident de travail.

De la réadaptation...

À partir du moment où son état s'améliore, la préoccupation principale

de l'employé devient son retour au travail. Va-t-il ou non pouvoir reprendre son emploi? C'est la grande question qu'il se pose. Si l'employé n'a aucune limitation fonctionnelle, il pourra rapidement reprendre son poste. Pour ceux et celles que l'accident aura laissé avec un certain pourcentage d'incapacité, il faudra mettre en place un processus de réadaptation. «Une fois l'état de la personne consolidé, nous tentons de voir comment elle peut réintégrer le travail, explique

«Il faut que le retour au travail se fasse le plus rapidement possible pour mettre un terme à l'incertitude qui mine le moral.»

Nicole Trudel-Marion. Avec l'aide de différents intervenants, comme le superviseur de l'employé, le Service de santé au travail, les représentants syndicaux, la CSST, les Ressources humaines et d'autres, nous établissons la démarche de retour au travail de l'employé qui vise avant tout la reprise du même emploi.»

...au retour au travail

La visite du poste de travail constitue une étape déterminante dans cette démarche. Elle permet à l'agente de réadaptation de vérifier la capacité du travailleur à reprendre l'emploi pré-accidentel régulier ou adapté ou, s'il y a lieu, d'étudier la possibilité de déterminer un emploi convenable au sein de l'entreprise. Après avoir vu l'environnement de travail et les tâches que doit effectuer l'employé qui a des restrictions fonctionnelles, celle-ci pourra proposer différentes avenues comme celle de modifier les outils ou les méthodes de travail pour lui permettre de remplir à nouveau son poste.

Elle pourra aussi suggérer, à la suite d'une entente avec l'équipe de travail, que l'employé puisse compter sur ses collègues pour effectuer certaines tâches qu'il ne peut plus accomplir. «Ce n'est pas toujours possible de retourner une personne à son poste régulier, explique Nicole. Par contre, la plupart du temps, nous réussissons à trouver un emploi équivalent qui, par exemple, comporte moins d'efforts physiques. Dans tous les cas, insiste-t-elle, il faut que le retour au travail se fasse le plus rapidement possible pour mettre un terme à l'incertitude qui mine le moral des employés qui ont subi un accident.» **L**

Entre l'accident et le retour au travail

1. Le superviseur de l'employé avise les «Réclamations générales» de l'accident. L'employé reçoit un montant équivalent de 90 p. 100 de son salaire net jusqu'à ce qu'il retourne au travail.

2. L'employé doit remplir un formulaire prévu à cet effet par la CSST après avoir contacté le service des Réclamations générales. Il doit aussi remettre une copie de la déclaration du médecin traitant à son employeur. Les formulaires sont transmis à la CSST par les Réclamations générales.

3. Aussitôt que les formulaires de la CSST sont remplis par l'employé et qu'ils sont reçus par les Réclamations générales, le CN verse à l'employé un montant équivalent à 90 p. 100 de son salaire net pour les 14 premiers jours d'incapacité.

4. Après les 14 premiers jours, c'est la CSST qui verse directement à l'em-

ployé l'équivalent de 90 p. 100 de son salaire net jusqu'à ce qu'il retourne au travail.

5. Si l'état de santé de l'employé le permet, le CN peut l'affecter temporairement à une tâche autre que son emploi habituel durant sa période de consolidation. Ce travail doit cependant respecter ses limitations fonctionnelles. L'employé est payé par le CN.

6. Au moment où l'état de santé de l'employé est consolidé, il peut soit:

- retourner à son travail régulier;
- retourner à son travail régulier adapté;
- occuper un autre poste convenable au CN ou à l'extérieur, avec ou sans formation.

Rehabilitation on the job

Another way to get the job done just as well

BY JULIE GOULET

At CN, people are injured on the job every day. Sometimes an injury involves a simple scratch or cut that just needs to be cleaned and bandaged, so that the employee can resume working right away. At other times, accidents are much more serious. They can turn the victim's, and his or her family's, life upside down. Often the employee involved doesn't know whether they will ever be able to work again.



Rehabilitation on the job is a real challenge for Nicole Trudel-Marion. "Rehabilitation is a complex field; each case requires special attention."

Those who have been involved in work accidents know how disorienting it is to suddenly find themselves in hospital without knowing how they will cope. Who will pay their mortgage and other bills during their convalescence? When will things get back to normal? There are many other questions which cause just as much concern. "No one is prepared for an accident to happen, and it's not unusual to feel discouraged when it happens to us," stated Nicole Trudel-Marion, General Claims

Rehabilitation Officer. "Once the shock of the accident has worn off, the employee goes through a period of uncertainty which subsides as the state of health improves and the person is receiving regular payments from the Commission de la santé et de la sécurité du travail (CSST)," she explained. (See summary.)

In fact, during the stabilization period, i.e., until the person's health stabilizes, the employee receives 90% of his/her salary through the CSST, which also takes care of all expenses related to the employee's health and his/her return to work. This may involve hospitalization fees, orthopedic prostheses, retraining that may make it easier for the employee to return to work, etc. The CSST sends CN a monthly statement, and CN, as an employer held specifically responsible for benefits, must reimburse all costs related to work accident cases.

Rehabilitation...

From the moment their condition improves, injured employees' main concern becomes their return to work. Will

they be able to return to their regular jobs or not? This is the most important question. If an employee has no functional limitations, he/she will be able to return to his/her former position within a short time. For those who, as a result of their accidents, are disabled to a certain degree, a rehabilitation procedure must be established. "Once the person's condition has stabilized, we try to see how

"Employees who have been injured in accidents should return to work as quickly as possible, to put an end to the uncertainty that erodes their morale."

he/she can return to work," explained Nicole Trudel-Marion. "With the help of the various parties concerned, such as the employee's supervisor, Occupational Health Services, union representatives, the CSST, Human Resources and others, we determine a return-to-work procedure for the employee who, more than anything else, wants to return to the same job he/she had before."

...Returning to work

A visit to the employee's work station is a crucial step in this process. It allows the rehabilitation officer to verify the employee's ability to resume the work he/she was doing before the accident, either in the same way or with some adaptation, or to study the possibility of determining an appropriate job for him/her within the company. After examining the work environment and the tasks that an employee with functional limitations must perform, the officer may make various suggestions, such as modifying tools or work methods to allow the employee to work at the same job as before. She might also suggest, after first discussing the matter with other team members, that they help the employee to perform certain tasks that he/she can no longer perform. "It's not always possible to reinstate someone in their regular job," explains Trudel-Marion. "Most of the time, though, we do succeed in finding an equivalent position which, for example, involves less physical effort. In all cases," she stresses, "employees who have been injured in accidents should return to work as quickly as possible, to put an end to the uncertainty that erodes their morale." **L**

The period between the accident and the employee's return to work:

1. The employee's supervisor notifies General Claims about the accident.
2. The employee must fill in the appropriate CSST form after contacting General Claims. He/she must also submit a copy of his/her attending physician's report to the employer. General Claims then sends the forms on to the CSST.
3. As soon as the employee fills in the CSST forms and General Claims receives them, CN pays the employee an amount equivalent to 90% of his/her net salary until he/she returns to work.
4. Within the first 14 days following the accident, the CSST reimburses CN 90% of

his/her net salary until he/she returns to work.

5. If the employee's condition allows it, CN may temporarily assign the employee to a different job during the stabilization period. This assignment must take the employee's functional limitations into account. The employee is paid by CN.

6. When the employee's condition has stabilized, he/she may:

- a. return to his/her regular job;
- b. return to his/her regular job, under adapted conditions;
- c. fill another suitable position at CN or elsewhere, with or without training.

VAINCRE L'INCERTITUDE

PAR JULIE GOULET

Le courage et la détermination dont Caroline, Claude, Denis et Richard ont fait preuve après avoir subi un accident de travail constituent une belle leçon de vie, une source à laquelle puiser les jours de temps gris. L'histoire qu'ils nous racontent est semée d'embûches, de moments de découragement et d'espoir aussi. Dans tous les cas, le retour au travail après de longs mois de convalescence représente la lumière au bout du tunnel, la fin de l'incertitude.

Caroline Comtois a vécu l'enfer Apprendre à vivre autrement...

La chambre que Caroline Comtois occupait à l'hôpital de Chicoutimi était devenue le rendez-vous du personnel infirmier qui s'y rassemblait pour placoter ou écouter Musique Plus. Un beau moment dans la journée de Caroline, quelques minutes qui lui permettaient d'oublier l'accident qui lui avait fait perdre un bras et une jambe le 9 novembre 1990 alors qu'elle travaillait comme serre-frein à Chambord.

«À l'hôpital, je n'étais pas vraiment consciente de mon état surtout à cause des doses substantielles de morphine qu'on m'injectait pour calmer ma douleur», se rappelle Caroline. Au centre de réadaptation François Chabon, c'est la souffrance physique et morale que je voyais autour de moi qui me donnait l'impression de vivre dans un monde irréel. En revenant à la maison, j'ai eu tout un choc.

Après six opérations, dont une rendue nécessaire pour réparer la négligence d'un chirurgien qui avait oublié un fragment d'os dans sa jambe, elle réintègre le domicile de ses parents à Jonquière. Pour Caroline, un mot décrit bien cette période de sa vie: l'enfer. Après avoir cultivé l'indépendance pendant toute sa jeunesse, le fait de devenir, pour reprendre ses propres termes, «plus difficile à déplacer qu'un réfrigérateur», était totalement inconcevable pour elle. «Mes amis me disaient: «C'est pas grave Caro, on va aller te chercher, on va la pousser ta chaise. Moi, je préférais rester à la maison et regarder des films. Je n'acceptais pas non

plus qu'on me regarde comme une extraterrestre.»

Petit à petit, au fil des mois, elle se remet à faire des projets. Premier grand défi: apprendre à porter une prothèse. À l'été 1992, elle est déterminée à s'y habituer mais, après quelques mois, elle

Quand j'avais ma prothèse, je pleurais parce que ça me faisait mal et quand je l'enlevais, je pleurais parce que je voulais marcher.

abandonne, la douleur ayant raison de son courage. «Je pense que je n'étais pas vraiment prête», reconnaît Caroline. Quand j'avais ma prothèse, je pleurais parce que ça me faisait mal et quand je l'enlevais, je pleurais parce que je voulais marcher.

À cette époque, le surintendant Transport, Steve Siska et l'agent de réadaptation Nicole Trudel-Marion communiquent régulièrement avec Caroline pour savoir comment elle va et ils lui parlent d'un retour au travail possible à titre de chef de triage. Malgré le sentiment



Caroline n'oubliera jamais l'aide et le soutien moral que lui apportent tous ceux qui l'aiment.

d'échec qui l'habite, Caroline s'accroche à cet espoir qu'elle considère comme la première bonne nouvelle depuis trop longtemps. «Cela ne s'est pas fait du jour au lendemain», précise Nicole. Il fallait obtenir l'accord de toutes les parties pour créer un poste de chef de triage au centre de triage de Chambord. La motivation de Caroline à retourner au travail était vraiment convaincue de faire tous les efforts nécessaires dans ce sens.

Un retour au travail benoqueté

Depuis un an qu'elle travaille au département des Jeunes, Caroline a pu reprendre son travail. Evidemment, le retour au travail n'est pas été facile. Une fois de retour à Jonquière à Chambord effectuée, une heure de route - sa jeep Cherokee est

...vivre autrement - suite à la page 10

>...vivre autrement

suite de la page 7

tionnée, sa chaise roulante débarquée et poussée à l'intérieur, il ne lui restait presque plus d'énergie pour entreprendre des tâches qu'elle devait apprendre jour après jour. «Il faut dire que, depuis que j'ai redécidé de porter ma prothèse, c'est beaucoup plus simple, précise-elle. En plus, quand j'arrive ici, je me sens utile et appréciée. Je n'ai pas le temps de penser à moi, c'est bien mieux comme ça.»

Depuis un an aussi, Caroline recommence à faire des projets. Cet au-

tomne, elle supervise la construction de sa maison à Des Biens au Lac-Saint-Jean. Puis, elle planifie de faire éventuellement un voyage en Floride pour aller visiter un grand chum qu'elle n'a pas vu depuis cinq ans. Essayer de vivre le plus normalement possible en cherchant le bon dans le mauvais, c'est un peu sa nouvelle philosophie. «Vois-tu, moi quand je vais chez des amis, je m'assois et j'attends qu'on me serve. Quand je reçois à la maison, c'est la visite qui fait la vaisselle. C'est pas tout le monde qui peut en dire autant...» **L**

OVERCOMING UNCERTAINTY

BY JULIE GOULET

The courage and determination of Caroline, Claude, Denis and Richard following their work accidents are a good lesson for all of us, a source of inspiration when our luck is down. Their stories are riddled with moments of difficulty and discouragement, but also with hope. Returning to work after many long months of convalescence is the light at the end of the tunnel for them, the end of uncertainty.

Caroline Comtois Learning to live again

Caroline Comtois' room at Chicoutimi Hospital became the meeting place of the nursing staff who would gather there to chat and watch Musique Plus for a few minutes. Caroline enjoyed this time for it gave her a chance to forget the terrible accident on November 9, 1990, in which she lost an arm and a leg while working as assistant conductor at Chambord.

"While I was in the hospital, I wasn't really aware of my condition, largely because of the morphine injections I was receiving to control the pain," remembers Caroline. At the François Charron rehabilitation centre, I saw physical and emotional suffering all around me, and I felt like I was living in a surreal world. Going home was quite a shock."

After six operations, one to remove a bone fragment from her leg that a surgeon had neglected to remove during a previous operation, Caroline went home to her parents in Jonquière. She describes this period in her life as hell. She had been a very independent woman prior to the accident, and it was difficult for her to find herself, as she puts it, "harder to move than a refrigerator." It was too much for her to bear. "My friends would call me. It's OK, Caro, we'll come and get you and push your chair. I preferred to stay home and watch movies. And I couldn't stand it when people looked at me as if I was an alien."

Gradually, as the months went by, she began to set herself goals, the first of

which was to wear an artificial limb. In the summer of 1992, she was determined to get accustomed to wearing a prosthesis, but after a few months her pain proved stronger than her courage. "I guess I wasn't really ready," explains Caroline. "When I wore the

"When I wore the limb, I cried because it hurt so much, and then when I removed it, I cried even more because I wanted to walk."

limb, I cried because it hurt so much, and then when I removed it, I cried even more because I wanted to walk."

Steve Siska, Transportation superintendent, and Nicole Trudel-Marion, rehabilitation officer, kept in touch with Caroline to monitor her progress, and they spoke to her of the possibility of returning to work as a traffic coordinator. Despite her feelings of defeat, she hung on to this ray of hope that was the first good news she had received in a very long time. "It didn't happen overnight," explains Nicole. "First we had to get



Caroline will never forget the invaluable help and support of family and friends.

everyone involved to agree to create a 18:00 to 02:00 position at Chambord." It was Caroline's determination to return to work that convinced everyone to do whatever had to be done.

On the job again

Caroline has been back at work for a year now. She works Sunday through Thursday and feels alive again. Going back to work was not easy, but Caroline says it was necessary. After driving an hour from Jonquière to Chambord, parking her Jeep Cherokee and unloading her wheelchair and wheelchair inside, she barely had enough energy left to tackle her daily work. "I must admit that things have been difficult,"

...live again - continued on page 10

>...live again

continued from page 7

easier since I decided to wear my prosthesis. And I feel useful and appreciated here. I don't have time to dwell on my situation, and it's better that way."

Caroline has been working on other projects as well over the past year. She is supervising the construction of her house in Des Biens, Lac-Saint-Jean, and she plans to eventually visit an old friend of hers in Florida whom she hasn't seen in over five

years. Her new philosophy is to try to live as normally as possible while looking at the positive side of things. "You know, when I go visit friends, I sit and wait to be served. And when they come over to my place, they do the dishes. There aren't too many people who can say that!"

Richard Harvey a conservé une attitude positive

Le drame de l'incertitude du retour au travail

L'entretien de la voie n'avait aucun secret pour Richard Harvey qui depuis 22 ans exerçait son métier à Chambord au Lac-Saint-Jean sans véritable problème. Un beau jour d'août 1991, ce grand gaillard aidait l'opérateur de grue à décharger des rails lorsque, soudain, c'est l'accident. Un rail tombé par terre rebondit et vient lui frapper le coude. Résultat: une fracture ouverte de deux pouces et l'os du coude égrené en 200 petits fragments. Le grand gaillard s'effondre sous la douleur. Il est transporté à l'urgence de Roberval où déjà «mon bras ressemblait davantage à celui de Popeye qu'au mien», ironise-il.

La suite, il s'en souvient aussi très bien. L'orthopédiste qui l'opère le soir même lui enlève les fragments inutilisables et lui place, dans ce qui reste du coude, quatre tiges de fer, des vis et du fil de fer. Il lui fait aussi un plâtre standard qu'on lui retirera peu de temps après par-

ce qu'il était imbibé de sang. Cette fois, la douleur a raison de Richard et il s'évanouit dans le bureau du médecin.

Pendant le mois qui suit, le bras dans un plâtre en fibre de verre, il attend patiemment le jour de la deuxième opération. À l'hôpital de Roberval, on lui prélève des os dans la hanche pour les lui greffer au coude, ce qui viendra combler l'importante perte d'osseuse occasionnée par l'accident.

«Au début, raconte Richard, je croyais que tout rentrerait dans l'ordre rapidement. Au fur et à mesure que les mois passaient, je me suis mis à douter. Pourrais-je un jour reprendre le travail? Avec 29 p. 100 d'incapacité au bras et un médecin qui lui disait qu'il ne pourrait pas refaire le même travail, Richard avait raison de s'inquiéter. «Quand ça fait 22 ans que tu fais le même travail, tu te sens pas mal désorienté», confie-t-il.

Après 13 semaines de physiothérapie où il rencontre des gens qui vivent des situations beaucoup plus difficiles que la sienne, il se dit que ce qui lui arrive n'est pas si grave que cela et qu'en gardant une attitude positive il réussira à passer au travers. À la fin de ses traitements, il se fixe un objectif: reprendre son travail, le seul job qu'il connaisse vraiment.

Diane Laliberté, son épouse et infirmière de surcroît, son agente de réadaptation, Nicole Trudel-Marion, et son représentant syndical, André Trudel, sont 100 p. 100 derrière lui. Grâce à leur appui et à sa grande détermination, Richard obtient un essai de trois mois à son ancien poste. «Je n'étais pas sûr du tout de pouvoir faire comme les autres, raconte-t-il. Surtout après 20 mois sans travailler et la crainte de me blesser à nouveau. Mais je voulais tenter le coup. La première journée a été dure, vraiment dure.»

Des maux et des mots

Dans le journal qu'il avait convenu d'écrire à la demande de Nicole, Richard relate avec simplicité et réalisme comment il vit le retour au travail dans le quotidien. Un document précieux qui se



Richard Harvey n'avait pas l'intention de laisser un accident l'empêcher de reprendre son métier d'agent de la voie qu'il connaît sur le bout de ses doigts depuis 22 ans.

bâtit au fil des jours. Le premier journal qu'il n'aie jamais écrit. Pour Nicole Trudel-Marion, «le journal de Richard nous a permis de voir l'évolution de sa situation et d'évaluer la pertinence de son retour au travail régulier.» (Voir l'extrait du journal.)

Maintenant qu'il a repris son emploi, Richard n'a pas perdu ses habitudes de «gros travailleur». Son seul problème: avant, quand il voyait l'ouvrage à faire, il partait en avant et il le faisait. Aujourd'hui, il doit demander l'aide des autres membres de l'équipe pour effectuer certains travaux. «Je vois l'arrache-crampon par terre et je ne peux plus le prendre. C'est ça qui est dur pour moi. Heureusement, les gars sont bien corrects. Ils me disent même: «Touche pas à ça Richard, on va le faire.»»

Et la crainte de se blesser reste-t-elle toujours présente? «Quand je travaille, j'ai toujours ça derrière la tête. Par contre, on trouve rapidement une façon de travailler pour ne pas se blesser. Maintenant, je me sers surtout de ma main droite, par exemple. Mais la crainte, ce n'est rien, comparativement à l'incertitude que j'ai vécue avant de savoir que je pouvais reprendre mon travail...» L



Lundi 22 août 1991
Mon premier jour de travail
accident survenu le 22 août 1991. Je
parti avec 4 autres hommes pour changer
rouleaux à mon coude gauche.
... se fait

Richard Harvey always looks on the bright side

The stress of coping with uncertainty

Richard Harvey knew all there was to know about track maintenance having successfully plied that trade for 22 years in Chambord in the Lac-St-Jean area. One fine day in August 1991, while helping a crane operator unload some rails, the unthinkable happened. A rail fell and then bounced, hitting him in the elbow and resulting in a two-inch open gash and his elbow bone smashed into 200 fragments. The pain felled the gentle giant instantly. He was immediately transported to Roberval, by which time, as he sarcastically puts it, his arm looked more like Popeye's than his own.

He remembers what happened next all too well. The orthopedist who operated on him that same night removed all the unusable fragments and put his elbow back together using four steel pins, some screws and steel wire. His arm was also put in a cast, which was removed shortly

thereafter because it became soaked with blood. This time the pain was too much to bear, and Richard fainted in the doctor's office.

During the ensuing month, his arm wrapped in a fibreglass cast, Richard patiently awaited the day of his second operation. At Roberval hospital, he underwent a procedure to remove bones from his hip to be used in rebuilding his elbow.

"At first," says Richard, "I thought I would have a speedy recovery. As the months passed, though, I began to have serious doubts about whether I would ever be able to go back to work." With a 29% disability in his arm and a doctor who kept telling him he would never be able to do the same work again, Richard had every reason to worry. "When you've been doing the same job for 22 years, that kind of news can turn your whole life upside down," he confides.

After 13 weeks of physiotherapy, during which time he met some people with injuries far more serious than his own, he began to feel that his situation wasn't all that bad and that he could get through it by maintaining a positive attitude. At the end of his treatments, he set himself a goal: to go back to his job, the only work he really knew.

Diane Laliberté, his wife and a nurse, Nicole Trudel-Marion, his rehabilitation officer, and André Trudel, his union representative, were behind him one hundred percent. Thanks to their support and his own unwavering determination, Richard was able to go back to his old job for a three-month trial period.

"After 20 months off work, I really wasn't sure whether I could keep up with my co-workers. Also, I had to cope with the fear of injuring myself again. But I was determined to try. The first day was tough, really tough."



Richard Harvey, track maintainer, wasn't about to let an accident stop him from doing the job he loves and has been doing for 22 years.

Pain and progress

At his rehabilitation officer's request, Richard kept a journal in which he described, in a simple and down-to-earth way, how he coped with his return to work. It was the first time he had ever kept a journal, and it was a precious tool both for him and Nicole. Says Nicole, "Richard's journal has enabled us to follow his progress and assess the pertinence of his return to regular duty." (See journal excerpt.)

Now that he is back at work, Richard hasn't lost any of his "workaholic" ways. The only difference is that before, when he saw a job that needed doing, he would go off and do it. Now, he has to ask other members of his gang for help with certain tasks. "I see the spike puller lying on the ground, but I can't pick it up. That's hard for me to admit. Luckily, I work with a great bunch of guys. They'll tell me, 'Don't touch it, Richard, we'll do it.'"

Does he still worry about getting hurt again? "It's always in the back of my mind," Richard admits. "However, I've developed new ways of working to prevent that from happening. I use my right hand a lot more now. But the fear is nothing compared to the uncertainty I went through before I learned that I could finally go back to work." **L**



*Lundi 19 août 1993
Ma première journée de travail
après l'accident survenu le 22 août 1991. Je
partie avec 4 autres hommes pour changer
l'inclinaison à mon côté gauche.
Il fait*

Claude Dansereau a été blessé au dos

L'imagination porte fruit au pont de Beloeil

De 1977 à 1992, la saison de navigation marquait inévitablement le retour au travail pour Claude Dansereau, garde-pont à Beloeil.

Bon an, mal an, quatre à cinq fois par jour, cinq jours par semaine, son travail consistait, entre autres, à actionner une goupille (bras) avec une force de traction correspondant à un maximum de 150 lb. Un jour, selon ses propres termes, «en tirant sur un bras à deux mains, le pied appuyé contre une plaque, pour faire désengager la goupille et ainsi faire tourner le pont, j'ai ressenti une vive douleur au dos.» Cette douleur, ou plutôt cet accident, n'avait rien de banal puisqu'elle mettait abruptement un terme à 15 ans de travail comme garde-pont. À moins que...

Une visite concluante

En visitant le poste de travail de M. Dansereau, à la suite de son accident, l'agente de réadaptation Nicole Trudel-Marion observe de très près tout le mécanisme qui permet l'ouverture et la fermeture du pont. Vraisemblablement, seule la goupille posait problème. «Pour que M. Dansereau puisse reprendre son travail, il fallait absolument qu'il puisse effectuer ses tâches sans avoir à forcer, explique Nicole. La fameuse goupille pouvait-elle être actionnée autrement que manuellement? C'était le premier point à vérifier.»



Il a suffi d'un brin d'imagination et de collaboration pour que Claude Dansereau réintègre son emploi de garde-pont à Beloeil. De gauche à droite sur la photo: Yves Lachapelle, ingénieur Exploitation; Nicole Trudel-Marion, agente de réadaptation Réclamations générales; Claude Dansereau, garde-pont et Pierre Jean, superviseur Bâtiments et installations fixes.

Dans les jours qui suivent, l'ingénieur Yves Lachapelle du service de l'Exploitation effectue une visite du poste et constate qu'il est possible de concevoir un système qui permettra d'actionner la goupille électriquement. «Avec l'aide du groupe Bâtiments et installations fixes, secteur de Montréal, nous avons mis au point, en moins de quelques semaines, un système qui nécessitait simplement l'ajout d'un cylindre hydraulique que l'on fait fonctionner en appuyant sur un bouton», précise-t-il. Coût de l'opération: 3 500 \$, équipement et installation compris.

Quelques jours après sa mise en place, Claude Dansereau était invité à faire l'essai du nouveau système qui allait tout bonnement changer sa vie. «Quand on m'a appelé pour me dire de me rendre à Beloeil, je me suis dit que mon cauchemar était terminé. Pour moi, ce système se révèle une véritable merveille.»

Et pour son superviseur aussi qui, devant la réussite du pont de Beloeil, demandait à ce que le pont de Cantic subisse la même modification. «Une telle amélioration profite à tout le monde, souligne Pierre Jean, superviseur Bâtiments et installations fixes. Cela permet à M. Dansereau de reprendre son emploi et évite que d'autres personnes ne se blessent pour les mêmes raisons.» **L**

Pour faire pivoter le pont, Claude Dansereau devait auparavant actionner cette goupille avec une force de traction correspondant à 150 lb. Grâce au nouveau dispositif, il peut maintenant la faire fonctionner en appuyant tout simplement sur un bouton.

Excerpt from Richard's journal

Monday, April 19, 1993

My first day back on the job after my accident on August 22, 1991. This morning, I left with four other guys to go and change some rail. I didn't feel any pain in my left elbow. I worked very carefully.... My mood is positive, and I hope everything will go well over the next few days.

Wednesday, April 28, 1993

Big day ahead. We're preparing the material needed to change some rail at a road crossing in Roberval. We'll have to break the asphalt, remove the gravel to pull out the spikes, cut the rail, remove the filler and lay the new rail.... My elbow didn't bother me. The day went well, and I'm still being very careful. My co-workers are very understanding and help me out a lot.

Friday, April 30, 1993

... My second week on the job has gone well. The minor pain in my elbow hasn't affected the movements I must make to perform my tasks. I'm still getting a lot of help from my co-workers, and I feel more at ease with this now. There's a lot of good chemistry in our group.

Thursday, May 6, 1993

Left at 7:30 a.m. with foreman Richard Boily and his men in Roberval to go and change some broken rails. We replaced a total of seven 39-foot rails, one of which was at a planked crossing. We only took 20 minutes for lunch and then went back to work. No pain in my elbow. I'm always conscious of my arm, no matter what I do, and that's why things are going so well.

Friday, May 14, 1993

Last day of my four-week trial period. Left this morning with Richard Boily and two other employees, Alain Laforge and Robert Lindsay, to work somewhere between Lac Bouchette and Chambord. We removed some shims, raised some culverts and corrected the gauge at a joint. This afternoon, Richard Boily and I left to go and install a speed restriction sign between Saint-Gédéon and Saint-Bruno. Back at 4:00 p.m. to finish off the day. Good day. No pain.

Claude Dansereau suffered a back injury

Putting imagination to work

From 1977 to 1992, the shipping season inevitably marked Claude Dansereau's return to work as a bridge tender at Beloeil. Year in, year out, four to five times a day, five days a week, his work involved, among other tasks, moving a lever (arm) while exerting force equal to a maximum of 150 lbs. One day, as he explains in his own words, "as I was pulling on an arm with both hands, my foot up against the plate, to disengage the pin and rotate the bridge, I felt a sharp pain in my back." This pain, or rather, this accident, was no small thing, since it abruptly ended his 15-year career as a bridge tender. Or did it?

An important visit

When she visited Mr. Dansereau's work station after his accident, rehabilitation officer Nicole Trudel-Marion thoroughly examined the bridge's locking and unlocking mechanism. The pin appeared to be the only obstacle for Mr. Dansereau. In order for him to resume his job, he absolutely had to be able to perform his tasks without having to exert a lot of physical effort," she explained. "Could this troublesome pin be activated in some way that didn't involve manual effort? That was the first thing we had to look at."

Over the next few days, Yves Lachapelle, an Operations engineer visited the work site and noted that it was



All it took was a little imagination and cooperation for Claude Dansereau to resume his job as a bridge tender. From left to right: Yves Lachapelle, engineer - Operations; Nicole Trudel-Marion, rehabilitation officer - General Claims; Claude Dansereau, bridge tender and Pierre Jean, supervisor, Bridges and Buildings.

possible to design a system that would allow the pin to be activated electrically. "In under a few weeks, with help from the Bridges and Buildings group in Montreal, we developed a system that simply required the addition of a hydraulic cylinder that can be activated at the touch of a button," he explained. The cost of this operation: \$3,500, equipment and installation included.

A few days after it was installed, Claude Dansereau was asked to try out the new system that would clearly change his life. "When they called me and told me to go back to Beloeil, I told myself that my nightmare was over. I think this system is absolutely fantastic."

His supervisor feels the same way. In the wake of this system's success at the Beloeil Bridge, he requested that the Cantic Bridge undergo the same modifications. "This kind of improvement benefits everyone," pointed out Pierre Jean, Bridges and Buildings supervisor. "It allows Mr. Dansereau to go back to work and prevents others from being injured for the same reasons." **L**



Previously, to rotate the bridge, Claude Dansereau had to move this pin with a force equal to 150 lbs. Thanks to the new device, the pin can now be activated by simply pressing a button.

À son arrivée à l'hôpital de Trois-Rivières, il était clair dans la tête de Denis qu'il n'accepterait pas qu'on lui coupe la jambe sans que l'impossible soit tenté. À Québec, où on le transporte le lendemain, c'est la ronde des greffes de peau qui commence pour sauver sa jambe. « Deux mois plus tard, lorsque le médecin m'a suggéré de la couper, je savais que je n'avais pas tellement le choix, raconte-t-il. Je voyais bien que les opérations ne réussissaient pas. Dans un sens, je m'y attendais. Ça été moins dur que si c'était arrivé tout de suite. »

Malgré un grand désir de réapprendre à vivre sans sa jambe, Denis reconnaît que l'acceptation vient lentement, difficilement, au fil du temps. Réapprendre à marcher avec une prothèse constitue un premier défi auquel il faut accorder toute son énergie, toutes ses pensées. « J'ai passé cinq mois au centre François-Chartron à ne penser qu'à ma guérison. Je ne faisais aucun projet d'avenir. Je voulais seulement réapprendre à marcher. »

Une fois cette difficile étape franchie, sa conjointe «elle m'a aidé énormément» et le GN «une bonne compagnie grâce à laquelle je n'étais pas dans la rue» ont fait front commun pour préparer Denis à son retour au travail. «C'était le plus grand service qu'ils pouvaient me rendre, soutient-il. C'est important de se

sentir appuyer afin de reprendre le boulot le plus tôt possible.*

Au total, Denis a été absent du travail presque deux ans. Deux années pendant lesquelles il a réalisé que son accident a changé bien des choses dans sa vie mais pas à l'intérieur de lui-même. Bien sûr, la santé n'est plus aussi solide, les activités sportives ont cédé définitivement la place aux randonnées en Harley Davidson mais Denis, lui, n'a pas changé. Il est resté le même gars. Celui qui préfère regarder en avant, accepter et continuer.

Aujourd'hui, chef de train, demain peut-être aux commandes d'un convoi — lorsqu'il aura accumulé suffisamment d'ancienneté — Denis regarde définitivement devant. «Présentement, je trouve ça difficile de descendre de la locomotive quatre fois pendant le trajet de Québec à Shawinigan, surtout dans la neige. Je me dis que l'hiver prochain ça devrait aller mieux. Qui sait peut-être que j'aurai un train plus facile? De toute façon, on traversera le pont quand on sera rendu à la rivière...»

surce de la page 7

tionnée, sa chaise roulante détraquée et poussée à l'intérieur, il ne lui restait presque plus d'énergie pour entreprendre des tâches qu'elle devait apprendre jour après jour. « Il faut dire que, depuis que j'ai redécidé de porter ma prothèse, c'est beaucoup plus simple, précisez-elle. En plus, quand j'arrive ici, je me sens utile et appréciée. Je n'ai pas le temps de penser à moi, c'est bien mieux comme ça. »

Depuis un an aussi, Caroline recommence à faire des projets. Cet au-

tomme, elle supervise la construction de sa maison à Des Biens au Lac-Saint-Jean. Puis, elle planifie de faire éternellement un voyage en Floride pour aller visiter un grand chum qu'elle n'a pas vu depuis cinq ans. Essayez de vivre le plus normalement possible en cherchant le bon dans le mauvais, c'est un peu sa nouvelle philosophie. «Vois-tu, moi quand je vais chez des amis, je m'assois et j'attends qu'on me serve. Quand je reçois à la maison, c'est la visite qui fait la vaisselle. C'est pas tout le monde qui peut en dire autant...» **L**

... "5" When he arrived at Trois-Rivières Hospital, Denis had already decided that there was no way he would let the doctors amputate his leg until everything else had been tried. He was moved to Quebec City the next day, where doctors began skin grafts in an attempt to save his leg. "Two months later, when the doctor suggested amputation, I knew that I really didn't have any choice," he explains. "I could see for myself that the operations had been unsuccessful. In a way I guess I was expecting it. It was easier to accept than had they amputated my leg right after the accident."

Learning to accept

Despite a strong desire to get on with life without his leg, Denis admits that accepting his loss has not been easy. Learning to walk with a prosthesis was the first challenge into which he channelled all his energy and thoughts. "I spent five months at the François-Charon Centre where I thought only about getting better. I made no plans for the future. All I wanted to do was to learn how to walk again."

Once this difficult task had been accomplished, his wife ("she helped me a lot") and CN ("a good company thanks to whom I still have a job") worked hard to prepare Denis for his return to work. "They couldn't have rendered me greater service," he says. "You need a lot

Denis Nolin does not feel sorry for himself. He can no longer participate in sports, but he enjoys riding his Harley and his ATV. He is shown here at Joffre Yard where he has been employed as a conductor since his accident.

of support so that you can get back to work as soon as possible."

In all, Denis was off the job for almost two years, during which time he realized that while many things in his life had changed, he was still the same guy as before. His health is not what it used to be, of course. He has had to give up sports but now instead goes for long rides on his Harley. But Denis, the person, has not changed. He is still a man who accepts, looks ahead and goes on.

Today he is a conductor, and one day when he has enough seniority, maybe he will be at the controls. Yes, Denis is definitely looking ahead. "I find it hard to get down from the locomotive four times during the trip between Quebec City and Shawinigan, especially when there's snow. I tell myself that maybe next winter it'll be easier. Who knows, maybe I'll have an easier train? In any case, I'll cross that bridge when I get to it." **L**



Michel Boucher

A long year

Does it seem to you that it's been a long year? It does to me. A year full of joy and pain all mixed together at a dizzying rate.

When I met you all during my tour of the region, I could sense that the changes we're going through right now are making you insecure, even denigrating you at times. You are sceptical, wondering what will happen to you and whether CN management knows where it is going. This is all perfectly normal. After all, it is all our futures that are at stake.

Please understand that CN management is not reorganizing the company for pleasure. We are irreversibly committed to change to making CN a competitive railway and a major player in the Canadian transportation industry.

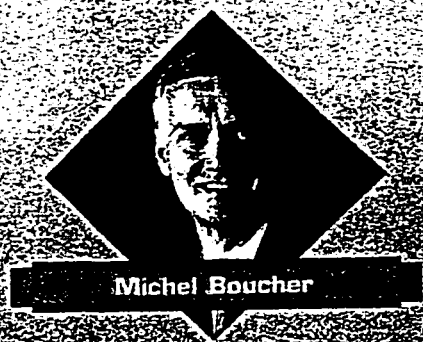
Studies have shown that if we are to remain in the race, we have to meet the challenge of change by slimming down, reducing our costs and increasing our revenues. Our shareholder, the federal government, slashed its own expenses in its last budget in an effort to reduce the Canadian deficit. Now it is asking us to do the same. In other words, the time has come to face the music, take the bull by the horns, pay the piper, call it what you will, we have to correct the situation and make Canadian National a profitable railway that you will be proud to work for. And that day isn't actually so far off.

Already there are positive signs. The economic recovery is strengthening all the time, and the pessimism of the last few years is gradually giving way to cautious optimism. What's more, CN is enjoying renewed support among political leaders, customers and consumers. Now is the time to take advantage of this momentum, and we are.

The figures for the St. Lawrence Region and for the Company as a whole are clear evidence of this upswing. For the third quarter of 1994, losses for the Region were \$700,000, as compared with \$1.5 million in the same period last year. Quite an improvement! If the trend continues, and we can make some changes in our ways of doing things, we can expect a balanced budget in 1995.

Now that's good news and reason to look forward with hope. In any case, this is what I wish for us all in 1995, and most importantly, the wisdom to accept the need for change.

Michel Boucher
Vice-President



Michel Boucher

Une grosse année

Si vous êtes comme moi, vous avez certainement l'impression d'avoir traversé une grosse année. Une année où les joies et les peines se sont entremêlées à un rythme époustoufflant.

Je l'ai senti en vous rencontrant lors de ma tournée régionale. Les changements que nous vivons présentement vous insécurisent et parfois le mot n'est pas trop fort, vous démoralisent. Vous êtes sceptiques, vous vous demandez si la direction sait où elle s'en va, vous vous posez des questions et c'est bien normal. Après tout, c'est notre avenir à tous qui est en jeu.

Sachez que ce n'est pas par plaisir que la direction du Canadien National réorganise l'entreprise de la façon dont elle le fait. Si la direction du CN est irréversiblement tournée vers le changement, c'est pour faire de cette entreprise un chemin de fer concurrentiel. Un pion majeur sur l'échiquier du transport au Canada.

Les études le démontrent, pour rester dans la course, le chemin de fer doit relever le défi du changement en allégeant sa structure, en réduisant ses coûts, en accroissant ses revenus. Dans son dernier budget, notre actionnaire, le gouvernement fédéral, a sabré dans les dépenses pour réduire le déficit du pays. Il nous demande de faire la même chose dans notre cour. En d'autres mots, il faut faire face à la musique, prendre le taureau par les cornes, appelez ça comme vous voudrez, pour redresser la situation et faire de cette entreprise un chemin de fer pour lequel vous serez fiers de travailler parce qu'il sera rentable. Et, ce, jour là, n'est pas si loin.

Déjà des signes positifs pointent à l'horizon. La reprise économique se fait de plus en plus sentir. La morosité des dernières années cède tranquillement la place à un optimisme prudent. En plus d'un contexte économique plus favorable, le chemin de fer bénéficie présentement de la faveur générale. Tous, dirigeants politiques, clients et consommateurs, reconnaissent sa valeur. Le CN doit profiter de ce momentum et il le fait.

Les chiffres pour l'ensemble de la compagnie et ceux de la région du Saint-Laurent nous l'indiquent clairement. Pour le troisième trimestre de l'année 1994, la perte de la région est évaluée à 700 000 \$ comparativement à 1,5 M\$ à la même période l'an passé. Quel redressement! Si la tendance se maintient et si certains changements sont apportés à nos façons de faire, nous entrevoyons un équilibre budgétaire pour l'année 1995.

Car, c'est une bonne nouvelle et une raison d'envisager l'avenir avec espoir. En tout cas, c'est ce que je nous souhaite à tous pour 1995 et, par-dessus tout, la sagesse d'accepter qu'il faut changer.

Le vice-président

Michel Boucher

Some like i

Since last summer, Canadian National has once again been carrying hot aluminum coils produced by Alcan, after having lost this contract to the trucking industry for several years. But it's not as simple as it might sound: the aluminum coils for rerolling leave the Saguenay-Jonquière plant at a temperature of 400°F and have to arrive at Terre Haute, Indiana, at a temperature of 50° to 120°F to keep the product in proper condition.

When CN went about winning back this market, it had to start by transforming 34 gondola cars into giant thermoses—no easy task. The company also had to devise a transportation plan to make sure that the coils could make it all the way to Terre Haute in less than seven days. As Anne Denman, account manager, Industrial Products, Marketing, explains, "We worked together with all the other partners involved and struck a balance between a perfect product for Alcan and a profitable job for CN." As easy as taking candy from a baby, right?

Meeting the customer's needs

Alcan Rolled Products was ready to be convinced that the railway could do a better job of meeting its requirements than trucks could. Mind you, the company wanted some tangible evidence before coming to a final decision. "Basically," says Marcel Carrier, comptroller at the Rolled Products plant, "we wanted CN to show us that it could provide the service at a competitive price, with fast and reliable delivery times, and still protect the coils during transport."

Marketing experts, engineers and carmen from Car Equipment spent nearly three years working together to sketch out a way to meet Alcan's



wanted CN to show us that it could provide the service at a competitive price, with fast and reliable delivery times, and still protect the hauling transport."



From left to right: Marcel Carrier, comptroller, Rolled Products, Alcan; Anne Denman, account manager, Industrial Products, Marketing, CN; Claude Gagnon, officer, Marketing, CN; Marcel Jean, engineering technician, Alcan; Gerry Weber, project engineer, Operations, CN; Robert Naud, technical director, Alcan; Gabrielle Landry, project engineer, Operations, CN; Jacques Brassard, operations planner, Alcan; and Charles Delisle, carman, Car Equipment, CN.

requirements. Alcan, for its part, was happy to cooperate throughout the process.

The key to the puzzle, the modified gondola cars, called for the energy and know-how of employees at the Senneterre Shop, where a prototype was produced from plans by Gerry Weber, a project engineer with Operations. "We started with a basic concept and fine-tuned it as we went along," explains Gerry. "We had to test a number of different kinds of thermal insulation before we found one that really gave us what we were looking for." In addition, the idea of permanent insulation was rejected in favour of insulating panels, to take account of all the wide temperature fluctuations in Quebec. In other words, it all boiled down to the weather.

Senneterre employees, under the supervision of Carman Charles Delisle, worked hard conducting tests on the route the cars would take to find out more about conditions. "It was a very stimulating experience," says Mr. Delisle. "It isn't every day that you're asked to transform a gondola car into a giant thermos."

A number of trials were done with the prototype, some of them in extreme cold, and it was finally approved in early 1994. Then it was up to the team at the Transcona Shops to build 34 of these specialized units.

Now Alcan can ship five to seven coils in each gondola car, as compared to three per truck. The coils CN carries are used mostly in making aluminum foil for North American homes. CN carries the coils of hot aluminum as far as Buffalo, where it hands them over to Conrail, which takes them on to Indianapolis. There the precious cargo is transhipped into Roll and Hold trucks for delivery to the Alcan plant in Terre Haute. "We reviewed our transportation plan with our partners, Conrail and Roll and Hold, and found that we can now deliver the goods in six days," says Anne Denman. "Soon we hope to be able to cut another day off the trip time. In a world that's constantly changing, you have to keep looking for further improvements," she concludes. **L**

Une leçon

PAR JULIE GOULET

Depuis l'été dernier, le Canadien National transporte à nouveau les bobines d'aluminium chaudes de l'Alcan, après avoir perdu ce marché aux mains des camionneurs pendant quelques années. Tout un défi à relever que le transport de ces bobines de relaminage qui partent de l'usine Saguenay-Jonquière à une température de 400°F et qui doivent arriver à Terre Haute (Indiana) à une chaleur se situant entre 50°F et 120°F afin de ne pas altérer le produit.

Pour reconquérir ce marché, le CN a d'abord dû transformer 34 wagons-tombereaux en véritable thermos géants, ce qui n'allait pas nécessairement de soi. De plus, il lui a fallu mettre en place un plan de transport qui permettait d'assurer la livraison des bobines à Terre Haute en moins de sept jours. Comme l'explique Anne Denman, directrice de comptes Produits industriels Marketing «en travaillant de concert avec tous les partenaires concernés, nous avons trouvé l'équilibre entre le produit parfait pour l'Alcan et un projet rentable pour le CN». Mais cela ne s'est pas fait en criant ciseaux...

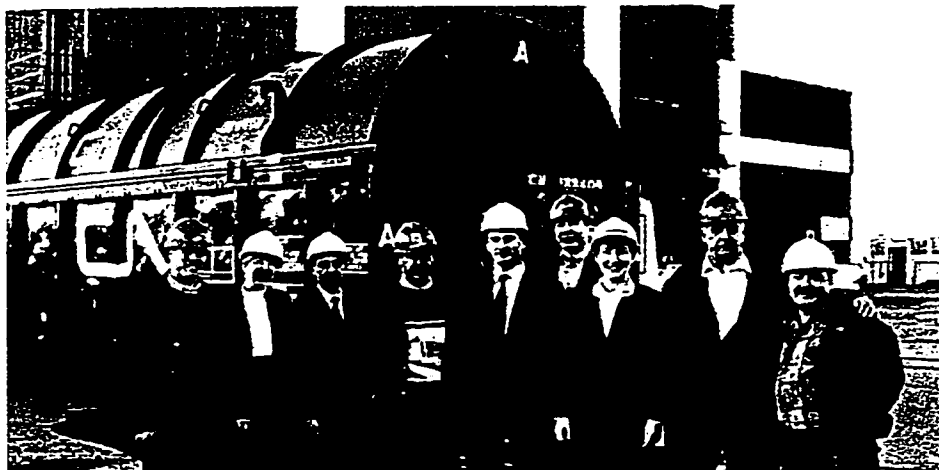
Répondre aux besoins du client

La compagnie des Produits Laminés Alcan ne demandait qu'à être convaincue que le chemin de fer pouvait mieux répondre à ses besoins que les camions. Toutefois, elle voulait certaines preuves tangibles avant d'arrêter sa décision. «Essentiellement, précise Marcel Carrier, contrôleur de l'usine des Produits Laminés, nous voulions que le CN nous montre qu'il pouvait nous offrir le service à un coût compétitif en préservant l'intégrité des bobines pendant le transport et en respectant des délais de livraison courts et stables.»

Pendant près de trois ans, spécialistes du marketing, ingénieurs et wagonniers du Matériel remorqué ont uni leurs efforts dans le but de répon-



« Nous voulions que le CN nous montre qu'il pouvait nous offrir le service à un coût compétitif en préservant l'intégrité des bobines pendant le transport et en respectant des délais de livraison courts et stables. »



De gauche à droite: Marcel Carrier, contrôleur de l'usine des Produits Laminés Alcan; Anne Denman, directrice de comptes, Produits industriels Marketing CN; Claude Gagnon, agent Marketing CN; Marcel Jean, technicien à l'ingénierie Alcan; Gerry Weber, ingénieur de projet Exploitation CN; Robert Naud, directeur technique Alcan; Gabrielle Landry, ingénieure industrielle Exploitation CN; Jacques Brassard, planificateur à l'exploitation Alcan et Charles Delisle, wagonnier Matériel remorqué CN.

dre aux exigences de l'Alcan, qui a offert une collaboration de tous les instants pour faciliter l'atteinte des résultats.

La pièce maîtresse, la modification du wagon-tombereau, a mobilisé énergie et savoir-faire à l'atelier de Senneterre où on a réalisé un prototype d'après les plans conçus par Gerry Weber, ingénieur de projet Exploitation. « Notre concept de base s'est raffiné en cours de route, souligne ce dernier. Entre autres, il nous a fallu essayer plusieurs isolants thermiques avant de mettre le doigt sur celui qui répondait vraiment à nos besoins. » De plus, l'idée d'une isolation permanente a dû être rejetée au profit de panneaux isolants amovibles afin de tenir compte des fluctuations de température majeures que connaît le Québec. En d'autres mots, il ne fallait surtout pas négliger le facteur climatique...

Du côté des employés de Senneterre, sous la direction de Charles Delisle, wagonnier, on travaillait assidûment en vue d'effectuer un test sur la route qui permettrait d'en savoir davantage. « Ce fut une expérience fort stimulante, souligne M. Delisle. Ce n'est pas tous les jours que l'on nous demande de transformer un wagon-tombereau en un thermos géant. »

Le prototype a fait l'objet de plusieurs essais, dont certains dans des conditions de froid extrême, pour être finalement accepté au début de 1994. À partir de ce moment, c'est l'équipe des ateliers de Transcona qui a pris la relève pour assurer la construction de ce nouveau parc de wagons spécialisés qui comprend 34 unités.

En faisant appel au rail, l'Alcan peut expédier de cinq à sept bobines par wagon-tombereau. Celles-ci servent surtout à la fabrication du papier d'aluminium domestique destiné au marché nord-américain.

Le CN achemine les bobines d'aluminium chaudes jusqu'à Buffalo où il les remet à la compagnie Conrail qui assure le trajet vers Indianapolis. De là, le précieux chargement est transbordé dans les camions de Roll and Hold pour livraison à l'usine de l'Alcan de Terre Haute. « En revoyant notre plan de transport avec nos partenaires, Conrail et Roll and Hold, nous sommes maintenant en mesure de livrer la marchandise en six jours, indique Anne Denman. Sous peu, nous pensons même pouvoir réduire le temps de transit d'une autre journée. Dans un monde en perpétuel changement, il ne faut jamais perdre de vue les améliorations possibles, conclut-elle. » **L**

APPENDIX XI

Copies of *À la pointe du futur / Point to the future* Articles

À LA POINTE DU FUTUR

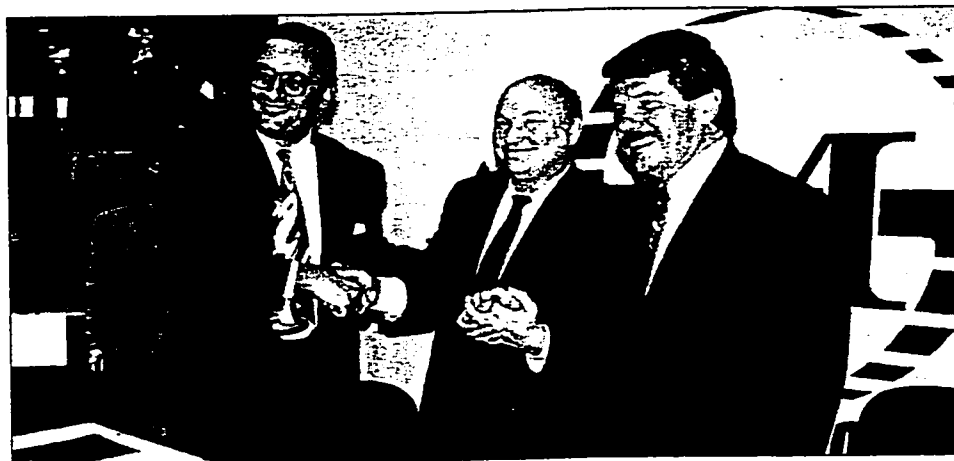
Le Magazine d'AMF ♦ Mars - avril 1993



Volume 7 n° 2

Ce n'est qu'un début !

C'est par ces paroles que M. Youri Louzhkov, maire de Moscou, ponctuait son discours à l'occasion de la signature du protocole d'entente sur le monorail et autres modes de transport. La cérémonie de signature s'est déroulée au Complexe Nord en présence des ministres québécois Daniel Johnson et Normand Cherry et du maire Doré qui apposa sa signature à titre de témoin de l'entente.



Fausto C. Levy, Youri Louzhkov et Jean Doré

M. Louzhkov tenait, en cette circonstance, les propos suivants :

« Nous sommes venus à Montréal afin de signer des ententes dans le domaine de la gestion urbaine; mais aussi, nous sommes ici pour échanger dans le domaine de la haute technologie. Les problèmes du transport, que connaissent toutes les grandes villes, n'épargnent pas une ville de neuf millions

de personnes comme Moscou. C'est donc avec plaisir que nous participons à l'initiative d'AMF de doter notre ville d'un système de monorail. Notre visite touche à sa fin, nous sommes très satisfaits des résultats obtenus. À AMF et à ses employés, je souhaite tout le succès dans leurs affaires et mes meilleurs vœux pour que s'établisse, entre nous, une longue collaboration ».

Le pdg d'AMF a, quant à lui, appuyé son exposé sur l'importance de l'événement en disant que l'entente du jour consacrait les efforts investis dans la conception de matériel roulant.

« Que ce soit par le train grande vitesse, le monorail ou les autocars, AMF commence à se tailler une réputation mondiale. Le droit de

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À LA POINTE DU FUTUR
est publié par:

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Ce numéro de À la Pointe du Futur
a été tiré à 2 100 exemplaires.
À la Pointe du Futur est publié 6 fois l'an.

Éditorial

par Denis Proulx

Place à l'innovation !

Dès le début de son existence, AMF avait prévu de se doter d'un service de conception en ingénierie. En choisissant de nommer ce service Recherche et développement, AMF voulait faire comprendre que s'il voulait demeurer viable à long terme, il devait à son tour innover et offrir des services d'ingénierie supérieurs, tout en développant de nouveaux produits.

À l'avenir, nous ne pourrons plus nous contenter de produire le même bidule jour après jour. À l'époque de P.-S.-C., ce n'était pas compliqué; CN Rail était notre seul client, un client pas ordinaire, il faut le dire. Ses besoins en locomotives et en wagons ne variaient pas vraiment: «J'en veux cinquante comme ceux de l'an dernier» !

Cette époque est bien révolue. C'est à se demander s'il ne serait pas souhaitable de suivre un cours accéléré en innovation. Les clients en veulent plus pour leur argent; le produit qu'ils recherchent doit être moins cher, plus facile d'entretien et plus souple d'utilisation. Dans un premier temps, nous devons donc rechercher les nouvelles techniques qui sont déjà au point et être les premiers à les offrir.



Jusqu'à présent, nous n'avons pas trop exagéré dans la recherche et le développement. Notre service R. et D. a dû s'occuper de choses plus terre à terre, par ex., le programme HEP, le contrat pour le métro, le contrat pour la Caroline du Nord et des estimations de coûts.

Cela ne veut pas dire que nous n'avons rien fait. Par exemple, AMF a fait démarrer, il y a deux mois, son fameux projet d'autobus. Ce véhicule à vocation interurbaine possédera des éléments de structure collés, une solution peu utilisée en Amérique du Nord, mais aussi un excellent argument de vente.

Différents autres projets sont à l'étude, par exemple: un banc d'essai contrôlé par ordinateur pour moteur diesel, un ensemble permettant de remplacer les paliers lisses de la suspension des moteurs de traction par des roulements à rouleaux ou encore, un entraînement hydraulique constant pour l'alternateur du système HEP.

Certains projets sont à l'étape de la conception :

- construction d'autobus à vocation urbaine, à partir d'un design d'AMF
- modernisation des locomotives LRC
- exploitation automatisée des trains, sur le réseau du QNS & L

Cependant, le service R. et D. devra tôt ou tard s'attaquer à des projets plus ambitieux, tel que:

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Mot du président

L'ouverture d'esprit comme plus grand dénominateur commun

Notre mission est d'être la première entreprise multinationale de reconstruction et remise à neuf du matériel roulant. Cependant, n'arrive pas là qui veut, comment alors la rendre possible ? AMF entend, pour atteindre ce haut niveau, mobiliser ses 1800 employés et employées afin qu'ils aillent ensemble dans la même direction.

Nous avons, jusqu'ici, accompli des changements prodigieux dans un court laps de temps; chacun de nous étant continuellement convié à fournir des efforts supplémentaires parce qu'ils devenaient nécessaires pour poursuivre dans la voie que nous avons choisie. Je vous dis aujourd'hui que des changements aussi profonds exigent, de chacun et chacune de nous, de faire preuve d'ouverture d'esprit et d'adapter notre conception productive à de nouvelles méthodes capables de nous conduire à des succès considérés inespérés dans le passé.

Nous sommes à l'ère de la mondialisation des marchés. Un jour, nous recevons l'ambassadeur du Canada au Pakistan, un autre jour, le ministre du commerce du Mexique; la semaine suivante, le maire de Moscou ne peut pas quitter Montréal sans avoir visité nos installations et signé un protocole d'entente. Nous sommes loin, n'est-ce pas, du temps jadis si reconfortant, où l'on commerçait avec un seul client ? Maintenant, ce

sont tous les pays du monde qui sont sollicités, ce sont eux aussi qui frappent à notre porte.

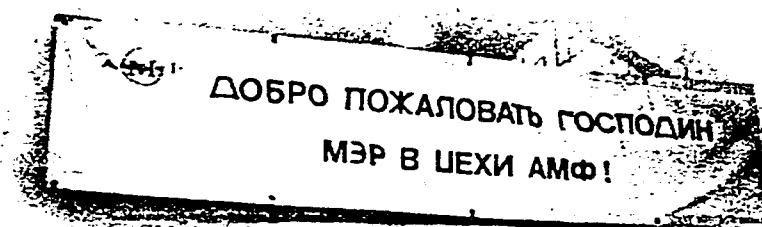
Ceci dit, mieux vaut connaître ces clients potentiels, mieux vaut les comprendre. Savons-nous à qui nous parlons ? La situation, en nous confrontant à un marché mondialisé, nous invite à sortir de l'ancienne coquille douillette et confortable. Elle nous invite à mettre le nez dehors, à nous intéresser à ce qui nous entoure par des lectures, par des études collégiales ou universitaires ou à tout le moins par un regard sur la culture en général. Pour qu'AMF accède au marché mondial, son personnel doit voir notre entreprise commerciale comme quelque chose de grand, de magnifique, digne de tous les zèles et de tous les efforts. La récompense viendra de l'obtention de la reconnaissance sur le marché mondial.

Le marché nous apparaissant aussi petit qu'un échiquier, nous deviendrons cette multinationale capable d'atteindre des sommets dans la reconstruction et remise à neuf du matériel roulant.

Fausto C. Levy

Ce n'est qu'un début !

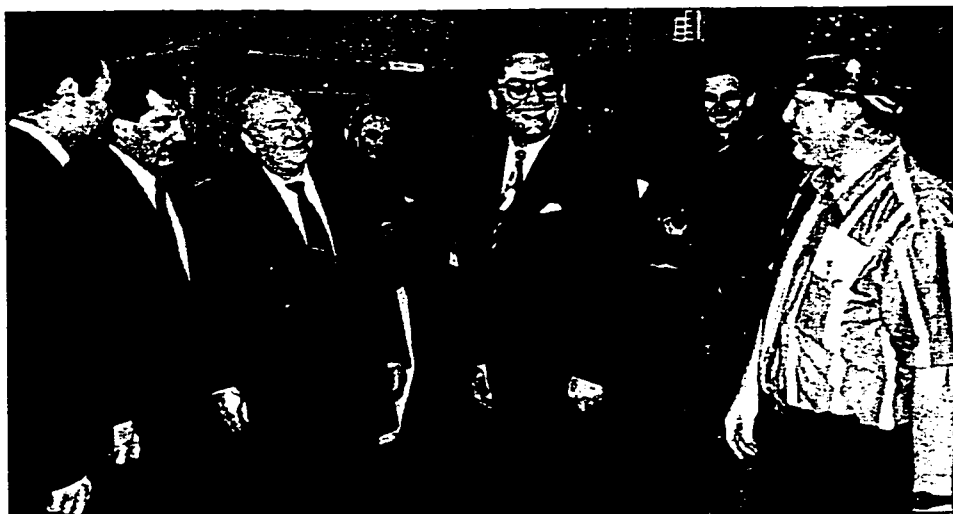
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«Monsieur le maire, nous vous souhaitons la bienvenue aux Ateliers d'AMF».

refus et celui de l'exclusivité, prévus dans l'entente, donnent un ton particulier au protocole, puisqu'ils privilégient notre entreprise, en lui conférant des droits de regard sur toute offre pouvant parvenir à notre client moscovite. AMF pourrait ainsi, à prix égal, remporter une soumission». Une première!

Le maire de Montréal avait plus d'une raison d'afficher un large sourire. M. Doré répétait à l'auditoire ce qu'il avait déjà dit à M. Louzhkov, à savoir qu'AMF est situé au coeur d'un quartier ayant lui aussi son histoire dans la révolution industrielle nord-américaine. De nos jours, la direction éclairée d'AMF et ses employés participent activement, par leurs initiatives, au redressement économique de la région du Sud-Ouest. AMF constitue main-



Les maires Doré, Louzhkov, Fausto Levy et Serge Goulet

tenant un chef de file sur le plan mondial dans son domaine. Il s'est dit très heureux d'avoir associé notre président à sa tournée en Russie, en octobre dernier. Il concluait par ces mots:

«C'est un honneur pour moi d'être, en ce 4 mars, à AMF et d'agir comme co-signataire du protocole d'entente vous liant à la ville de Moscou.»

Place à l'innovation

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- la conception d'un monorail
- des locomotives bi-énergie (diesel-électrique et électrique sous courant alternatif)
- des bogies pour locomotives rapides, avec moteurs de traction montés sur les bogies.

Comment AMF compte-t-il relever ces défis technologiques ? Pas seul, bien entendu, car il ne possède pas tout le savoir-faire

nécessaire. Pour compenser ses lacunes, AMF conclura des alliances stratégiques avec des entreprises possédant l'expertise voulue, par exemple TEMOINSA, dans le domaine des aménagements intérieurs modulaires, et tout récemment BRED A, dans les domaines des autobus, des véhicules ferroviaires légers et des trains à haute vitesse.

Toujours aux aguets, le personnel R. et D. ne doit pas laisser passer une occasion de tirer profit d'une nouvelle technologie prête à utiliser ou sur le point de l'être. En d'autres mots, les dés sont jetés. Bon nombre

des membres du personnel d'AMF possèdent déjà les ressources nécessaires pour «livrer la marchandise». La création d'une section Recherche et Développement a donc permis à ces gens de mettre leur créativité à l'oeuvre.

Tout le monde peut avoir le goût de l'innovation. Si vous avez des idées créatrices, n'hésitez pas à les soumettre à l'un des membres du service R. et D., en particulier au responsable du service Guy Blanchet. AMF a besoin de votre aide !

POINT TO THE FUTURE

AMF Employee Magazine ♦ March - April 1993



Volume 7 n° 2

It's only the beginning!

This is how Moscow mayor Youri Louzhkov summed up the speech he delivered at the signing of the memorandum of agreement with AMF for a monorail and other transportation systems. The signing ceremonies were held at the North Complex in the presence of Quebec ministers Daniel Johnson and Normand Cherry, and Montreal mayor Jean Doré who witnessed the agreement.



Fausto C. Levy, Youri Louzhkov and Jean Doré

Mr. Louzhkov delivered the following message at the ceremony: "We came to Montreal primarily to sign agreements in urban transit but we also came to trade high technology. Large cities everywhere are plagued with transportation problems, and Moscow, a city of nine million people, is no exception. It is therefore with great pleasure that we join forces with AMF to

equip Moscow with a monorail. Our visit here is almost over and I must report that it has been a highly satisfactory one. I wish AMF and its employees every success, and I hope that this is only the beginning of a long and profitable partnership."

AMF president and general manager Fausto C. Levy spoke of the importance of the event,

explaining that the agreement is the result of the time and money we have invested in developing new transportation products. "Be it high speed trains, monorails, or buses, AMF is making a name for itself in world markets. The agreement gives AMF the right of first refusal and contract exclusivity. In addition, AMF has the right to verify all

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POINT TO THE FUTURE
is published by:

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2100 copies of this issue were printed.
POINT TO THE FUTURE is published
six times a year.

Editorial

by Denis Proulx



The Innovative Approach

One of the necessities brought about by the creation of AMF was the establishment of its own design engineering force. It was named Research & Development in order to drive home the notion that AMF will have to rely on innovation in the form of value added engineering and new product development to ensure its long term survival.

In practical terms this means that simply punching out the same old widgets day after day will not do it. In the days of PSC, that was O.K. CN Rail was the only customer, and quite an unusual customer. Its taste for locomotives and cars was quite unvarying: "Give me fifty just like last year's order."

As we say, "Those days are gone." Now we have to give ourselves a crash course in "The Innovative Approach". The clients out there are looking for more bang for the buck. That means giving them what they need in a less costly, more maintainable, more flexible package. As a first step, that means identifying suitable new technology that is ready to be used and be the first to offer it.

So far, however, no one can say that R&D has overindulged in researching and developing. AMF R&D, till now, has been at grips with more immediate non-specifically R&D projects such as: HEP-1, Metro, North Carolina, plus many estimates.

This is not to say that nothing at all has been done in the area of R&D. One example is the AMF bus, a new product development effort which is only two months in the making. The bus, an intercity model, is to incorporate a bonded structure which has definite selling points, but is not common in America.

Other projects in progress are a microprocessor controlled diesel engine test cell, a roller bearing conversion for plain bearing suspended traction motors, and a hydraulic constant speed drive for a HEP alternator.

Projects in the conceptual stage are the following:

- manufacturing of an AMF urban bus design
 - modernization of LRC locomotives
 - automated train operation on QNSL line
- But sooner or later the R&D mission will go into a higher notch setting. More ambitious projects further out into the future are:
- monorail

Cont. on page 10



President's Message

An open mind: the greatest common denominator

Becoming the #1 multinational in manufacturing and remanufacturing transportation systems is the mission we have adopted. But how do we achieve it? AMF plans to mobilize each one of its 1800 employees to work together in attaining this common goal.

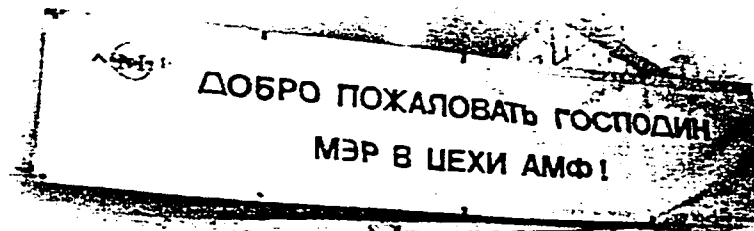
We have, thus far, made incredible progress in a relatively short period of time. Each and every one of us is constantly being asked to go the extra mile to ensure our success. AMF has undergone profound changes, changes that have forced us to drop our conventional ways and become more creative. We must keep an open mind and adapt to new methods and production processes that will take us to new levels of achievement.

Many of these changes are in response to the globalization of markets. AMF has recently welcomed the Canadian ambassador to Pakistan, the Mexican Minister of Trade, not to mention the mayor of Moscow who signed a memorandum of agreement with AMF before leaving Montreal. Things certainly have changed from that not so distant past when we were content and secure in dealing with a single customer. Now we are looking for customers in every country of the world, and they too are calling on us.

Having accepted this new world order as a fait accompli, isn't it better that we try to understand the ways and practices of potential customers, so that we know who we are dealing with and how to conduct business with them? We no longer live or work in a comfortable, sheltered world. We have to take an interest in what is happening elsewhere by reading, taking college or university courses, or at least taking a general interest in current affairs. AMFers must learn to think globally. Each of us has the potential to be a vital and dynamic element in the push to conquer world markets. The reward for our efforts will be getting international recognition.

We must have a global vision if we are to become the #1 multinational in manufacturing and remanufacturing transportation systems.

Fausto C. Levy



"AMF welcomes the Mayor"



Mayors Doré and Louzhkov, Fausto Levy and Serge Goulet

offers which Moscow may receive, thus enabling us to win the contract

by submitting an identical bid." A first!

Montreal mayor Jean Doré had more than one reason to smile. He reminded those in attendance of what he had already explained to Mr. Louzhkov, that AMF is located in an area steeped in the history of the North American industrial revolution. Today, AMF, through its leaders, participates actively in the economic recovery of Montreal's south-west area. AMF is now a world leader in its field. Mr. Doré went on to say how pleased he was that our president was part of the trade delegation that accompanied him last October during his tour of Russia. He concluded, "It's an honour for me to be here today to co-sign this memorandum of agreement between AMF and the city of Moscow."

The Innovative Approach

Cont. from page 2

- bi-energy locomotive (diesel / electric) including AC propulsion
- high speed locomotive trucks having truck suspended traction motors

How will AMF tackle these technological challenges? AMF surely cannot hope to be knowledgeable enough to do it all on its own. To compensate for our

deficiencies in the high-tech areas we form strategic alliances with companies having the required expertise such as TEMOINSA for modular interiors and, very recently, BRED A, for buses, light rail vehicles and high speed trains.

The AMF R&D people must be sharp in identifying any opportunity to innovate by taking advantage of technology which is ready or just about ready to be applied. In other words, the ball starts rolling at AMF. We already

had people at AMF who have what it takes to get the show on the road. To them, an R&D group was all they needed to come forth and put their innovative minds to work.

But innovation is open to anyone. If any of you have creative suggestions, please feel free to discuss them with any member of the R&D department, and particularly with Guy Blanchet who is heading the group. AMF needs you!

À LA POINTE DU FUTUR

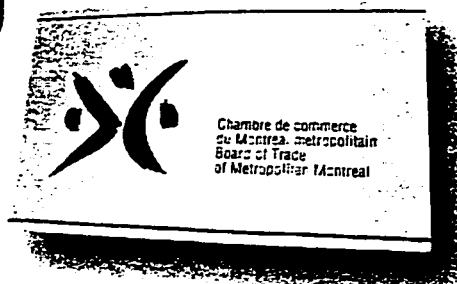


Le Magazine d'AMF ♦ Juin - Juillet 1993

Volume 7 no 3

Déjeuner-causerie du 4 mai 1993

Hôtel Le Méridien, Montréal
Conférencier invité:
M. Fausto Levy, pdg d'AMF



Le 4 mai dernier, Fausto Levy prenait la parole au dernier déjeuner-causerie de la saison 92-93 de la Chambre de commerce de Montréal. À la tribune, devant quelque 430 convives, devant la consule générale du Mexique, devant le milieu d'affaires montréalais, le pdg d'AMF a livré un vibrant plaidoyer. Pour lui, tout entrepreneur éclairé se doit de s'élever au-dessus des préoccupations quotidiennes s'il veut se donner des objectifs clairs et ambitieux.



Denis Larouche, Jean Guillaud, Fausto C. Levy, Doris Tapp, Bernard Roy,
Maria Emilia Farias de Avila et Luigi Liberatore

Le président a, dans un premier temps, décrit l'entreprise et parlé de sa graduelle transformation d'atelier industriel excédentaire en entreprise internationale.

Dans un deuxième temps, il a entretenu son auditoire du type de

problèmes que doit résoudre l'entreprise dans le contexte économique actuel.

Il a rappelé que, dès 1984-1985, la haute direction du CN songeait sérieusement à fermer son usine de Montréal. La rationalisation entre-

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et lectrices.....p. 20
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et le théâtre.....p. 24
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prise par la direction supposait le recours à des mesures drastiques: l'atelier de Moncton fermait et celui de Montréal devait passer par le même scénario. À moins que...

À moins que l'atelier de Montréal entreprenne un sérieux virage. C'est la version qui retint finalement l'attention: Faire d'AMF un supermarché du transport.

AMF naissait donc en plein climat d'insécurité, elle naissait dans une atmosphère de fermeture d'usines et, conséquemment, de pertes d'emplois. Il fallait sauver 1500 emplois et lutter pour garder ouverte la plus grande entreprise manufacturière de Montréal. Il fallait remonter le moral des cadres et des employés en leur proposant

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À LA POINTE DU FUTUR
est publié par:

AMF
1830, rue Le Ber
Montréal (Québec) H3K 2A4
Téléphone: 399-8318
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Ce numéro de À la Pointe du Futur
a été tiré à 2 100 exemplaires.
À la Pointe du Futur est publié 6 fois l'an.

Éditorial

Par Maren Gube



La responsabilité

Pour la plupart d'entre nous, il est naturel d'assumer nos responsabilités de manière sérieuse. Plus nous nous engageons à fond dans une activité, plus nous prenons au sérieux les responsabilités qui s'y rattachent.

L'activité la plus importante pour nous consiste à appuyer la mission d'AMF de s'élever au premier rang dans son secteur: cette responsabilité incombe à tous les membres du personnel d'AMF.

Nous devons réfléchir à ce que nous voulons accomplir (qu'il s'agisse d'une stratégie d'entreprise ou encore d'une tâche ou d'un projet particuliers), élaborer un plan d'action et l'appliquer à la lettre, en prenant les moyens qu'il faut pour y arriver. Il ne suffit pas de trouver une idée et d'en faire part à son voisin. Nous sommes tous fort occupés et les idées ont tendance à sombrer dans l'oubli, à moins que quelqu'un ne décide d'en faire son affaire.

Il semble qu'il soit plus facile de trouver des excuses et des raisons compliquées de ne pas avoir achevé certains projets. Combien de fois entend-on: «Mais j'ai demandé cela à telle personne et je ne peux rien faire tant que je n'ai de réponse», ou: «Je n'ai pas pu faire ce que vous m'avez demandé la semaine der-

nière parce que tels événements se sont produits en même temps, ce qui a retardé tel autre événement, parce que telle activité n'a pas donné les résultats prévus, que tel dossier a été égaré, que tel document a été livré au mauvais endroit et qu'il s'est écoulé un mois avant que telle personne ne se rende compte qu'il était là et que tel imprévu a modifié les priorités de sorte que tel dossier est devenu plus urgent. Nous allons tenter de nous en occuper, mais comme nous avons si peu de personnel, vous pouvez vous compter chanceux si nous y arrivons avant les Fêtes».

Au sein des entreprises prospères, il règne un sens de l'urgence et de l'engagement individuel. À AMF, nos méthodes ont beaucoup changé au cours des dernières années et nous devons nous imprégner de ce sens de l'urgence dans toutes les branches de l'entreprise.

Nous parviendrons à bâtir une entreprise forte si nous nous engageons personnellement, si nous tenons parole et acceptons d'être tenus responsables (par nous-mêmes et nos collègues) de nos gestes et de nos manquements. Pour réussir, l'entreprise doit obtenir plus de stabilité. Il lui faut éliminer le plus possible les surprises!



Mot du président

POSITIVE MOMENTUM*

Lors du déjeuner-causerie qui a eu lieu à la Chambre de commerce de Montréal, j'ai exposé deux concepts qui ont particulièrement retenu l'attention de l'auditoire: le «Positive Momentum» et «l'imagination calculée à haute vitesse». Dans mon discours, je voulais faire la lumière sur ces deux concepts étudiés lors des réunions du comité exécutif d'AMF. Le moment, se disait-on, était venu de révéler, à un public averti, le résultat de notre réflexion. Je voudrais aujourd'hui utiliser cette chronique pour vous entretenir du premier de ces concepts: la dynamique positive.

Qu'entendons-nous par dynamique positive? Que veut dire cette expression? Je m'y réfère souvent comme à une idée de mouvement, d'élan, de force vive ou de force impulsive. Pouvons-nous sincèrement prétendre qu'une entreprise dotée d'une mission, d'une vision et de valeurs puisse réussir sans mettre en oeuvre sa dynamique positive? Je dirais même qu'une entreprise qui veut avoir une vocation commerciale doit nécessairement rompre avec les habitudes du passé et chercher à tout prix à maintenir l'élan qu'inspire l'énoncé de sa mission.

La mission d'AMF est comprise lorsqu'on la présente à tous les niveaux, lorsqu'on en discute dans les comités et bien sûr aussi lorsqu'elle prend forme par l'application du principe des facilitateurs. Nous avons vu nos facilitateurs du projet métro se donner des objectifs, appeler leurs

collègues et les convaincre de rechercher ensemble l'efficacité. De plus, leur engagement va jusqu'à rendre des comptes sur l'accroissement et la qualité de la production de leur équipe et à prendre des décisions sur les facteurs importants qui influent sur la production. Et, parce que dorénavant, nous privilégions le travail d'équipe dans la résolution des problèmes au lieu de chercher à blâmer des personnes, voilà que, tout à coup, des talents trop longtemps gardés en réserve commencent à se découvrir. Sans tarder, l'ensemble de l'effectif de l'entreprise s'inspire de l'énoncé de la mission plutôt que d'attendre les directives: quelle belle dynamique positive!

La dynamique positive, c'est le couloir par lequel passent toutes les stratégies de l'entreprise; sans elle, la réalisation de la mission et des programmes accélérés stagnerait. La dynamique positive stimule les participants et elle fait d'eux des personnes constamment en apprentissage, qui perçoivent l'avenir de leur entreprise avec assurance.

Fausto C. Levy

La majorité des membres du personnel seront en vacances entre le 12 juillet et le 7 août. Je vous souhaite, ainsi qu'à vos familles, des vacances reposantes.

* en français: dynamique positive

des perspectives pour un avenir prometteur. Nous avons mis au point une vision d'entreprise, après nous être dotés d'une mission (devenir la première entreprise de production et de reconstruction

ainsi que nos clients que l'Atelier de Montréal regorgeait de capacités indéniables.

Une de nos grandes préoccupations, outre celle de l'orientation à donner, concernait la vitesse à laquelle nous nous devons d'attaquer le marché. La stratégie arrêtée commandait d'envahir tous les systèmes intégrés de transport, autant avec les voitures de métro,

Nous poursuivons notre lancée en concluant une entente d'exclusivité avec la ville de Moscou et en signant des contrats avec plusieurs compagnies américaines.

En 1991, nous avions deux clients, cette année, nous en comptons au-delà de quarante. L'entreprise, qui vivait jadis repliée sur elle-même, s'ouvre au commerce et évidemment, elle y trouve satisfaction. Elle a généré sa «dynamique positive» et s'est initiée à «l'imagination calculée à grande vitesse».

Le pdg a ensuite communiqué à son auditoire son engouement pour le principe des grappes industrielles. Il a appelé son public à soutenir le ministre Tremblay et, bien plus, lui a demandé de participer au processus par lequel, selon lui, chacun peut influencer sur les décisions.

Il a conclu en insistant sur le concept de la dynamique positive, qui rend possible l'enclenchement d'un processus de collaboration. Chez AMF, en peu de temps, cette dynamique a fait en sorte qu'un grand nombre de membres du personnel ont ressenti le besoin de s'impliquer. En haussant le volume d'activités, en signant de nouveaux contrats et en travaillant avec les syndicats (nos partenaires), nous avons redressé l'Atelier de Montréal.



Ubaldo Bernard de SRC et Yvon Laprade du Journal de Montréal, étaient sur les lieux

dans le transport), nous avons franchi une étape décisive.

Puis vinrent les premiers succès, d'abord modestes; ils permettaient tout de même de ressusciter l'enthousiasme en hibernation. Ensuite, par une efficace couverture médiatique, tant à l'interne qu'à l'externe, nous avons convaincu notre personnel, nos actionnaires

les autocars, les monorails qu'avec le train grande vitesse. Là où nous possédions de l'expertise, nous la renforçons, là où il nous en manquait, nous développons des alliances stratégiques. Après la livraison de 336 voitures de métro à notre client montréalais, nous prétendons pouvoir obtenir le contrat des 900 voitures de Mexico.

La guerre YES SIR!

Suite de la page 9

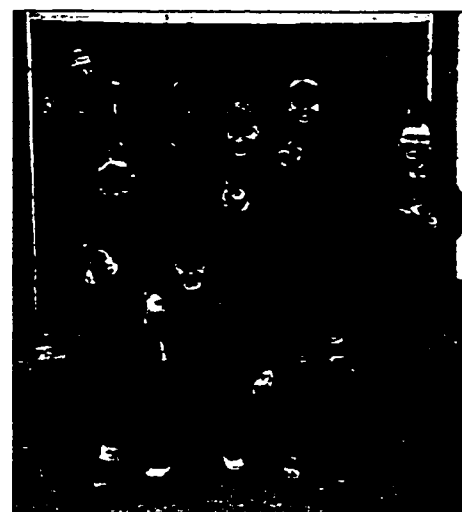
• Henri (Terminator) Lemire, de même que son bouclier humain Michel (Lasagne) Curley figurent parmi les combattants les plus intrépides de la journée.

La bataille a commencé vers 13 h et s'est terminée vers 19 h. Lorsque les trente belligérants ont déposé les armes, ils en avaient eu pour leur argent. Ils ont oublié, pendant cette drôle de guerre, les soucis du quoti-

2^e rangée- Michel Curley, Mario Arsenault, Claude Charette, Pascale Normandeau
Serge Lavoie;
accroupis: Martin Lévesque et Yves Cardin.

dien. Certains se sont retrouvés plus tard au restaurant, d'autres entendaient encore les «POW! POW!» lorsqu'ils sont entrés à la maison.

P.S.: Ces informations nous ont été fournies par un témoin oculaire; la personne a préféré ne pas divulguer son identité.



POINT TO THE FUTURE

PROUD TO BE IN IT



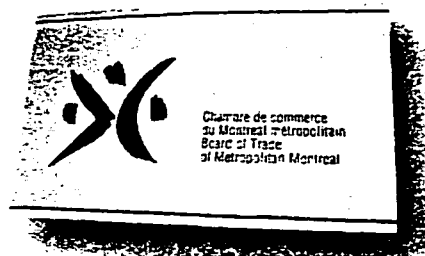
PROUD TO BE PART OF IT

AMF Employee Magazine ♦ June - July 1993

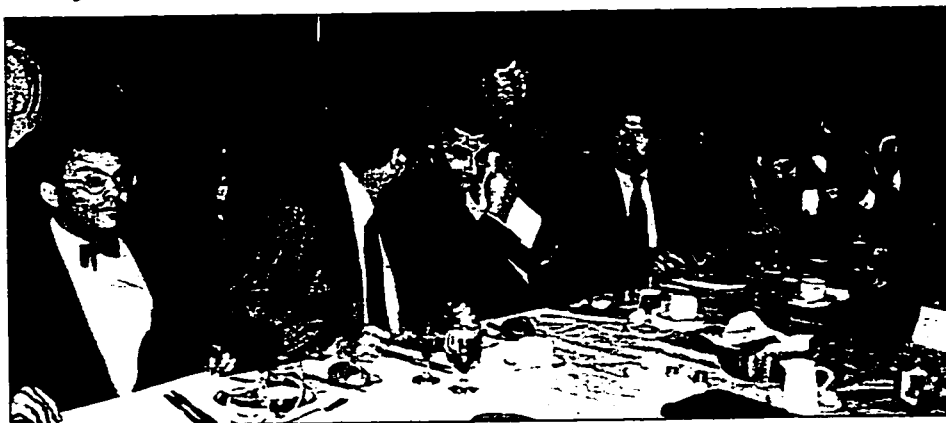
Volume 7 no 3

May 4, 1993 Business Luncheon

The Meridien Hotel, Montreal
Guest Speaker: Mr. Fausto Levy,
AMF President and
General Manager



On May 4, Fausto Levy was the guest speaker at the last business luncheon of the Montreal Board of Trade's 92-93 season. Speaking to some 430 guests, the Consul General of Mexico, and Montreal's business community, the President of AMF delivered a vibrant message. Mr. Levy stated that enlightened business leaders must rise above daily concerns if they are to set clear and ambitious goals.



Denis Larouche, Jean Guilbault, Fausto C. Levy, Doris Tapp, Bernard Roy, Maria Emilia Farias de Azila and Luigi Liberatore

Here is a summary of his comments.

The President began with a brief history of AMF, describing its gradual transformation from a surplus industrial shop to an international company.

He then spoke about the kinds of problems facing the company in the current economic climate.

He recalled that, in 1984-85, senior CN management was seriously considering shutting down its Montreal shops. Rationalization

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plans announced by CN management included drastic measures: the Moncton shop would close and Montreal would follow suit unless...

Unless the Montreal shop moved in a completely new direction. And that was the strategy that won out, to transform AMF into a transportation supermarket.

And so, AMF was born, in a climate of uncertainty, shutdowns, and layoffs. Our challenge was to save 1500 jobs and the largest manufacturing company in Montreal. We had to boost the morale of management and employees through proposals which promised a better future. We developed a company vision and, by adopting a company mission (to become the number one company in manufacturing and

Continued on page 10

NEWSLETTER TEAM

POINT TO THE FUTURE
is published by:

AMF
1830 Le Ber Street
Montreal (Quebec) H3K 2A4
Telephone: 399-8318
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2,100 copies of this issue were printed.
POINT TO THE FUTURE
is published six times a year.

Editorial

By Maren Gube



Accountability

Taking our responsibilities seriously is something most of us do naturally. The stronger our commitment to an issue, the more seriously we take our responsibilities relating to it.

Supporting AMF's mission to become the number 1 company in our field is the most important issue in the work-related part of our lives, and as "AMF'ers" we all have a responsibility towards it.

We need to think about what we want to accomplish (whether it's an overall corporate strategy or a specific task or project), set up an action plan, and then follow through with it - whatever it takes! Having thought about something or mentioned it to someone is usually not good enough. With everybody being so busy, things tend to "fall between the cracks" unless somebody makes it their business to carry it through.

It seems that it's often easier to build elaborate excuses and round-about reasons for not having completed certain projects. How often do you hear "But I asked someone for that a long time ago, I can't do anything about it until he or she gets back to me", or "I couldn't do

what you asked me for last week because "A", "B", and "C" all happened at the same time, and that caused "D" to be delayed, and "E" turned out to not be what it was supposed to be, and then the file for "F" got lost and "G" was delivered to the wrong place and sat there for a month before "H" realized that it was even there, and "I" came up out of the blue and shifted priorities, so "J" became more urgent as a result. So, we'll try to look after the stuff you asked for, but since we're so short-staffed you'll be lucky if it happens before the holidays".

There is a sense of urgency and personal involvement that pervades the organizations of successful companies. At AMF, our way of doing business has changed greatly over the past couple of years, and we need to bring this sense of urgency to all areas of the company.

We can build a strong company if we all take our commitment personally, live up to our promises, and are ready to be held accountable (by ourselves and others) for our actions and inactions relating to the promises we have made. In order to succeed, the company needs more stability and fewer surprises!

POSITIVE MOMENTUM



President's Message

In a speech to the Montreal Board of Trade recently, I described two concepts that the audience found particularly interesting: "positive momentum" and "calculated imagination at high speed." My purpose was to throw some light on these two ideas, which we had studied at meetings of the AMF executive. We felt that the time had come to reveal the results of our discussions to an audience that could benefit from them. Today, I would like to use this column to tell you about the first of these concepts, positive momentum.

What do we mean by positive momentum? What message do these two words convey? I often refer to this concept as an idea of movement, energy, a vital or driving force. How can a company with a mission, a vision and values be successful if it can't release its positive momentum at the same time? I would even say that a company that wants to be a commercial success must necessarily break with its past and do all it can to maintain the impetus flowing from its mission statement, whatever the cost.

AMF's mission is understood if it is applied at every level. It is understood if it is discussed in committees and, of course, integrated into facilitators' principles. We have seen how our facilitators for the Metro project assigned themselves goals, and then encouraged and convinced their colleagues to work together to achieve efficiency. Their commitment extended to taking on

responsibility for greater production quantity and quality; they made decisions on the major aspects of their work. And because, from now on, we are stressing teamwork in problem-solving, rather than looking for someone to blame, everyone's talents are starting to come to light after being hidden away for too long. Everyone throughout the company is now drawing inspiration from our mission, rather than waiting for instructions. What could better illustrate our positive momentum?

Positive momentum is the tunnel through which all our other strategies are implemented. Without it, the company's mission and its accelerated programs would stand still. As positive momentum takes hold, it stimulates everyone involved and keeps them learning continuously. They can look on the future of their company with confidence.

A stylized, handwritten signature of Fausto C. Levy in dark ink.

Fausto C. Levy

Most AMF employees will be on vacation from July 12 to August 7. I wish you all a safe and relaxing vacation.



remanufacturing transportation systems), we took a decisive step.

There followed some initial successes, modest at first, but sufficient to revive enthusiasm. Then thanks

entation, was the speed with which we needed to take on the market. The adopted strategy entailed breaking into various different transportation system markets,

out to win a contract from Mexico City for 900 cars. Forging ahead, we concluded an exclusive agreement with the city of Moscow, and signed contracts with several American cities.

In 1991 we had two customers, and this year we have more than forty. The company, which was once entirely focused on itself, has opened up to commercial markets, from which we have obviously benefitted. We have generated "positive momentum" and entered the world of "calculated imagination at high speed."

The President then expressed his support for the idea of industrial clusters. He called on the audience, not only to support government minister Gerald Tremblay, but further to participate in the process through which, he is convinced, each of us can influence decisions.

He concluded by insisting on the concept of positive momentum, which can lead to a process of collaboration. At AMF, this momentum very quickly inspired personnel and restored their faith in the company's future. By increasing the volume of activities, by signing new contracts, and by working with the unions (our partners), we have put AMF solidly on its feet again.



Ubaldo Bernard, CBC, and Yvon Laprade, Journal de Montréal, had plenty of questions for Mr. Levy

to effective broad-based internal and external communications efforts, we convinced our personnel, our shareholder, and our customers that AMF was brimming with potential.

One of our greatest concerns, aside from adopting an overall ori-

including subway cars, buses, monorails, and high speed trains. Wherever we already had some expertise, we strengthened it; wherever we lacked expertise, we established strategic alliances. Following the contract for 336 subway cars with our Montreal customer, we set



AMFers march off to war!

Continued from page 9

2nd row - Michel Curley, Mario Arsenault, Claude Charette, Pascale Normandeau, Serge Lavoie; squatting: Martin Lévesque and Yves Cardin.

• Henri "Terminator" Lemire and his human shield, Michel "Lasagne" Curley, were among the day's bravest soldiers.

The battle began around 1:00 p.m. and ended at 7:00 p.m. When our thirty belligerents finally put down their arms, they had certainly gotten their money's worth. Through this make-believe war,

they succeeded in forgetting their daily woes. Some got together later at a restaurant, while others went home with the "BANG!" of their guns still ringing in their ears.

P.S. The above information was supplied by an eyewitness who has requested that his or her identity not be revealed.



À LA POINTE DU FUTUR

FIER D'Y ÊTRE



FIER D'EN ÊTRE

Le Magazine d'AMF technotransport inc. ♦ Août - septembre 1993 Volume 7 no 4



AMF se constitue en société

**Le 1^{er} septembre
au matin, les membres
de l'exécutif étaient nerveux,
les secrétaires s'affairaient
aux derniers préparatifs.**

*Le vice-président des Affaires juridiques et secrétaire général du CN,
Me Alphonse Giard et le président directeur général d'AMF, Fausto C. Levy.*

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À 8 h 30, le vice-président des Affaires juridiques et secrétaire général du CN, Me Alphonse Giard, la secrétaire générale déléguée, Marie-Andrée Prénoveau, Margriet Zwarts, d'Ogilvy Renault, l'adjointe exécutive d'AMF, Élyse Desforges, de même que Michel Martineau, procureur général associé ont commencé à se passer les documents. À 9 h, le président d'AMF a apposé sa signature au bas du document qui fait officiellement d'AMF une filiale autonome, propriété exclusive de CN Amérique du Nord, sous le nom de AMF TECHNOTRANSPORT INC.

À 10 h, M. Levy a réuni les superviseurs des deux Complexes à la cafétéria principale pour leur expliquer le processus de constitution en société et répondre à leurs ques-



De gauche à droite, l'adjointe exécutive d'AMF, Élyse Desforges, la secrétaire générale déléguée, Marie-Andrée Prénoveau de même que Michel Martineau, procureur général associé au CN.

tions. Il s'est ensuite adressé aux travailleurs par groupes. Le président a retracé l'itinéraire qu'a suivi l'entreprise ces dernières années. Le repositionnement sera, selon lui,

un facteur décisif pour le succès futur de l'entreprise. La constitution en société va lui faire gagner du temps lors des prises de déci-

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À LA POINTE DU FUTUR
est publié par:

AMF technotransport inc.
1830, rue Le Ber
Montréal (Québec) H3K 2A4
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Ce numéro de À la Pointe du Futur
a été tiré à 2 100 exemplaires.
À la Pointe du Futur est publié 6 fois l'an.

Éditorial

Par Pierre Tremblay



Les nouvelles contraintes de la production

Dès mon arrivée chez AMF (en février 1992), on me confiait le mandat de la restructuration, ce qui comportait, outre l'élimination de deux niveaux de supervision, la préparation du terrain menant au partenariat et à un engagement plus profond de la part du personnel.

Les décisions ont été prises. La compagnie a fait du chemin ; nous constatons de plus en plus les avantages de la décentralisation. Les unités administratives s'organisent et l'engagement du personnel accroît notre productivité. Je dirais surtout que c'est la compréhension des objectifs d'AMF qui a grandi. De plus, comme les syndicats assistent dorénavant aux réunions de la revue financière, ils comprennent nos problèmes et proposent d'emblée des solutions. Par les temps qui courent, AMF se doit de relever promptement de nombreux défis : d'une part, se restructurer en tant qu'entreprise commerciale et, d'autre part, effectuer une planification étroite des travaux relatifs aux contrats que nous signons.

Nous avons commencé par tenir trois rencontres avec les directeurs de division et leurs associés. Le but était de s'entendre sur le choix des moyens dont nous disposions pour atteindre nos objectifs. Ensuite, nous avons communiqué nos décisions à l'ensemble du personnel. La compréhension de notre mission nous a mené à adopter les concepts de la gestion participative et du partenariat avec les syndicats. Ces

derniers nous ont aidé à respecter l'échéance du contrat du métro et à offrir à la Division des autocars un avenir prometteur.

En quoi consistera la période suivante ? Il semble, hors de tout doute, que la planification de notre production bénéficierait d'un raffinement. Prenons comme exemple les contrats de locos que nous obtenons et les exigences de livraison précisées par nos clients. Ceux-ci, en nous accordant des contrats, ne s'interrogent pas sur la capacité de nos installations ni sur la disponibilité de notre personnel. C'est à nous de les accommoder. Nous avons donc décidé de devenir membre de l'APICS (American Production and Inventory Control Society). Nous pourrions ainsi échanger des idées et connaître ce qui se pratique ailleurs dans le domaine de l'analyse technique de la planification.

Bref, si nous avons relevé le défi de la commercialisation, nous sommes maintenant prêts à relever celui de la croissance. Au fait, elle est là, elle ne tient pas uniquement à la reprise économique, mais également à la nature même du virage que nous avons entrepris depuis maintenant plus d'un an. Continuons ce bon travail.

La rumeur, l'explication et la réalité



Mot du président

Durant l'été, les dossiers d'AMF n'ont pas cessé d'évoluer. Nous avons consolidé le carnet de commandes pour nos deux Complexes. Tout en poursuivant nos démarches de quête de contrats, nous avons fait avancer le dossier traitant de la constitution d'AMF en filiale autonome, propriété exclusive de CN Amérique du Nord. Nous avons persévéré et marché d'un pas progressif et sûr dans le chemin tracé depuis janvier 1992.

Nous avons jusqu'ici réformé notre entreprise en l'administrant avec des méthodes supérieures. Notre service de marketing nous a fait connaître sur le marché mondial et a affermi notre position. Conséquemment, nous poursuivons en nous dotant d'une structure juridique adéquate. À AMF TECHNO-TRANSPORT INC., nous sommes suffisamment conscients et comprenons que pour accomplir notre mission, nous devons édifier des fondations solides sur notre sol.

Si, au moment présent, certains d'entre vous sont encore hésitants, je peux les assurer que rien ne changera de façon radicale. Le personnel aurait tort de croire qu'il a subi ou qu'il subira une perte de bénéfices.

Pour devenir la première entreprise multinationale de production et de reconstruction de matériel ferroviaire, nous avons dû trouver la structure financière et juridique, qui seule, pouvait nous conduire à l'optimisation. La structure juridique que nous avons finalement adoptée tient compte de nos talents et elle nous aidera à nous surpasser. Le processus de l'autonomie, je le

rappelle, est évolutif. Souvenons-nous qu'en 1988, il était question de fermeture ; aujourd'hui, ce n'est heureusement plus le cas. Le nombre des personnes actives dans l'entreprise est passé depuis ce temps de 1 300 à 1 800 et on y compte une cinquantaine de superviseurs additionnels. Nous avons donc réussi à assurer les emplois et à les augmenter.

Je dirais que le scénario prévisible pour AMF TECHNO-TRANSPORT INC est très prometteur. Il nous appartient de croire suffisamment en nous et en cette entreprise pour ensuite vouloir agir sciemment sur sa destinée. Quand on soutient l'entreprise, on fait rayonner autour de soi une énergie positive qui dissipe le négativisme et le train de rumeurs qui l'accompagne.

L'ancienne structure était désuète. Nous l'avons changée pour nous permettre d'affronter en toute confiance le marché mondial. En choisissant de se constituer en société, rien de dramatique ne s'est produit pour le personnel, tout changement futur sera le fruit de la consultation. Nous conserverons et tâcherons d'augmenter nos bénéfices parce que toute l'équipe d'AMF TECHNO-TRANSPORT INC. veut travailler coude à coude à la prospérité de l'entreprise.

Je tiens à remercier publiquement M. Paul Tellier et M. Yvon Masse pour leur soutien indéfectible.

Fausto C. Levy

Suite de la page couverture

sions. AMF transige maintenant avec de nombreux clients, tant au plan national qu'international ; l'entreprise a évolué, comme en témoigne sa constitution en société sous le nom de AMF TECHNO-TRANSPORT INC.

Par sa constitution en société, AMF cesse d'être une division de CN RAIL pour devenir une filiale à part entière du CN, dotée de sa propre structure de gestion ainsi que de son propre conseil d'administration, lequel comprendra des administrateurs de l'extérieur.

Après chacune des présentations, le personnel a entouré le président



Le pdg s'adressant aux employés.

pour le féliciter et le remercier des efforts qu'il a déployés pour conduire l'entreprise au succès. Les gens d'AMF TECHNOTRANS-

PORT INC., manifestement fiers d'y être et fiers d'en être, se sont ralliés à la décision de constitution en société.

Compte rendu du travail accompli durant la période des vacances

Services techniques

La fermeture des ateliers s'est passée de façon fort différente cette année. D'abord, il faut noter que des membres du personnel ont été présents dans presque tous les secteurs de l'usine. Nous devons continuer à fournir les services de réparation tout en nous occupant de l'entretien préventif. De plus, nous avons mené plusieurs projets ayant trait à la production et au déménagement d'équipements multiples. Notre été, croyez-moi, a été fort rempli.

Voici une liste abrégée des travaux réalisés :

- I Le déménagement du système informatique de la comptabilité dans l'édifice abritant l'équipe de la sécurité.
- II L'aménagement de la Division des autocars : installations électriques, monte-charges, etc.

- III Début des travaux de construction d'un bureau supplémentaire pour nos dessinateurs du service Recherche et développement.
- IV L'installation d'une nouvelle ligne de 400 ampères à l'atelier de mise en service.
- V L'agrandissement de la salle d'attente du bureau principal.
- VI Modifications apportées sur les machines-outils importantes.
- VII Les 18 et 25 juillet, nous avons interrompu le courant électrique alimentant les stations de distribution afin de procéder aux vérifications d'usage, au renouvellement des huiles au besoin et au nettoyage des composantes.
- VIII L'excavation de trois réservoirs (protection de l'environnement).

Nous sommes très satisfaits du déroulement des activités : les travaux majeurs ont été complétés. Nous ne comptons aucun membre du personnel accidenté. Les répara-



Fernand Boisvert et Renaud Potvin ont déplacé un ventilateur.

tions durables effectuées au cours des années nous permettent d'envisager les périodes de fermeture avec calme.

Bruno Rajotte

POINT TO THE FUTURE

PROUD TO BE IN IT



PROUD TO BE PART OF IT

AMF Technotransport Inc. Employee Magazine ♦ August - Sept. 1993 Volume 7 no 4



Alphonse Giard, vice-president, Law, and secretary of CN and Fausto C. Levy from AMF.

AMF TECHNOTRANSPORT INCORPORATED

**An air of nervous excitement
permeated the executive
offices on the morning
of September 1st.**

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It was apparent from the frenzy of last-minute activity and preparations that an important announcement was about to be made. At 8:30, Alphonse Giard, vice-president, Law, and secretary of CN, Marie-Andrée Prénoveau, general secretary, Margriet Zwarts from the law firm of Ogilvy Renault, Élyse Desforbes, executive assistant, AMF, and Michel Martineau, attorney, sat down to review the incorporation documents. At 9:00 a.m., the president of AMF signed on the dotted line and AMF officially became a wholly-owned subsidiary of CN North America operating under the name of AMF TECHNO-TRANSPORT INC.

At 10:00 a.m., Mr. Levy convened the supervisors of both Complexes



From left to right : Élyse Desforbes, executive assistant, AMF, Marie-Andrée Prénoveau, general secretary and Michel Martineau, attorney.

to the main cafeteria to explain the process of incorporation and answer their questions. He then met with the workers group by group. The president spoke briefly of the

company's itinerary during the past few years. Mr. Levy explained that the move will accelerate decision-

Continued on page 10

NEWSLETTER TEAM

POINT TO THE FUTURE

is published by:

AMF Technotransport Inc.
1630 Le Ber Street
Montreal (Quebec) H3K 2A4
Telephone: 399-8318
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2,100 copies of this issue were printed.
POINT TO THE FUTURE
is published six times a year.

Editorial

By Pierre Tremblay



New Production Constraints

U pon arriving at AMF in February 1992, I was given a mandate to restructure which included, among other things, the elimination of two levels of supervision, laying the foundation for partnerships, and a greater commitment from employees.

The decisions were made. The Company has come a long way since then, and the advantages of decentralization are more evident with each passing day. Administrative units are being set up, and increased employee commitment is leading to higher levels of productivity. Above all, I think the big difference is a better understanding of AMF's goals. Now that union representatives attend the fiscal review meetings, they understand the problems we face and can immediately propose solutions. AMF faces two major challenges: restructuring to become a viable commercial enterprise, and careful planning of contract work.

Our first step was to hold three meetings with division managers and their colleagues to reach a consensus on what means we would use to achieve our goals. We then informed all personnel of our decisions. Understanding our mission led us to adopt participative management and partnership with the unions. The unions were instrumental in helping us to meet the dead-

line for the subway contract and in building a promising future for the bus division.

So what's in store in the future? Certainly our production planning could use some fine tuning. Take for example the deadlines on locomotive contracts. When awarding contracts, customers don't ask us about our production capacity or the size of our workforce. They expect delivery on a certain date, and we have to accommodate the customers, not the other way around. That's one reason we joined the American Production and Inventory Control Society (APICS), to be able to exchange ideas with other members and find out what they are doing in terms of production planning techniques.

In short, we met the challenge of becoming a commercial enterprise, and we are now ready to tackle our next challenge—growth. Our growth is not dependent solely upon economic recovery, however, but also upon the very nature of the change we began more than a year ago.

Let's keep up the good work.

Rumour, fact and reality



President's Message

AMF pursued its activities on various fronts during the summer months. We consolidated a number of orders for both of our Complexes, and while pursuing our efforts to seek new contract opportunities, we became a wholly-owned subsidiary of CN North America.

We have undergone many changes in the past year, especially in management attitudes and practices. Our Marketing department has put us on the map, so to speak, and strengthened our position in world markets. Our new legal status is another step in solidifying our position and achieving our goals. We are fully aware that to accomplish our mission, AMF TECHNO-TRANSPORT INC. must establish a foundation of trust and confidence within its own walls. To those of you who are still hesitant and unsure about the changes going on, let me reassure you that have not and will not lose any benefits as a result of AMF's new status.

In order to be the leading multinational company in transportation equipment manufacturing and remanufacturing, we had to adopt an appropriate financial and legal structure. Our new legal structure takes into account our strengths and talents. The process of autonomy, as we know, is an ongoing one. Back in 1988, the future of the shops appeared bleak and there was talk of closure. Fortunately, that is no longer the case. The number of active employees has risen from

1300 to 1800, including an additional 50 supervisory jobs. We have succeeded not only in maintaining employment, but increasing it.

I believe that AMF TECHNO-TRANSPORT INC. has a promising future. We have to believe in ourselves and the company in order to make it happen. Positive energy dissipates rumours and negativity, and motivates those around us.

The old structure was obsolete. We have changed it in order to compete effectively on world markets. Employees will not lose any of their rights because of AMF's status as a duly incorporated company. We will preserve and endeavour to increase our benefits because we all want to see AMF TECHNO-TRANSPORT INC. succeed.

I would like to publicly thank Mr. Paul Tellier and Mr. Yvon Masse for their unwavering support.

Fausto C. Levy

Continued from cover page

making and will improve our ability to attract a broader base of heavy repair and manufacturing business from a growing list of international clients.

Incorporation of AMF will see our status changed from being a function of CN's rail division to a full-fledged subsidiary of the corporation with our own management structure and board of directors. The board will comprise a number of external directors.



Talking with the president

After each presentation, the workers surrounded Mr. Levy to offer congratulations and thank him for his efforts to make AMF a success. The employees of AMF TECH-

NOTRANSPORT INC., proud to be in it - proud to be part of it, approved the decision to be incorporated.

Engineering Works

While the Rest of AMF PLAYS!

The Engineering department kept busy during the summer holidays. Contrary to previous years in which only a skeleton staff remained during the vacation shut-down, this summer there was a buzz of activity in the shops. Staff was present in practically every sector of the shops which meant that we had to continue providing repair services while performing the annual preventive maintenance tasks. In addition, we took advantage of the slow period to relocate equipment and carry out various other production projects. Not a moment's rest!

Here are just some of the projects completed:

- I Accounting's computer equipment was moved to the building housing the security staff.
- II The Bus Division was fitted out:

electrical installations, freight elevator, etc.

- III Work began on a new office for our R&D draftspeople.
- IV A new 400 amp line was installed at the Testing shop.
- V The main office waiting room was enlarged.
- VI Additions or modifications were made to our major machine tools.
- VII The power was cut on July 18 and July 25 at the distribution station so that testing, oil changes, and parts verification could be done.
- VIII Excavation of three reservoirs (environmental protection).

All of the major work scheduled was completed, and there were no accidents. All in all we are very satisfied with the way operations were



Fernand Boisvert and Renaud Potvin moved a fan.

run and are confident that our equipment is in first-class running order.

Bruno Rajotte

À LA POINTE DU FUTUR



Le Magazine d'AMF
Janvier - février 1993
Volume 7 n° 1

La Division des autocars d'AMF est née

Le 23 décembre de l'année 92 restera une date mémorable pour l'entreprise AMF. C'est en effet ce jour-là que se signait le contrat entre les parties permettant à AMF de créer une nouvelle division, pour la remise à neuf des autocars, cette fois.



Brett Schlossberg, Esq., Fausto C. Levy, Georg W. Paffrath

Ce contrat, permettait à AMF d'acquérir les actifs et la technologie de la firme américaine CAP A BUS située à Salado au Texas. La petite taille des installations de cette firme, qui a mis au point des concepts tout à fait originaux de fabrication des autocars, ne lui permettait plus de répondre à la demande. Selon notre service de Recherche et Développement, AMF

peut aisément augmenter la qualité et parfaire les méthodes de production; de plus, AMF bénéficie d'installations qui l'autorisent à tirer le maximum des talents de sa main-d'œuvre. AMF croit fermement pouvoir livrer un produit à valeur fortement ajoutée.

Le travail de déblayage (comprenant l'étude du marché) conduisant à la signature du contrat

est le résultat de l'action d'une équipe regroupant le Marketing, la Production et la R et D. Mais tous ces efforts n'auraient pas abouti sans l'entente intervenue entre les syndicats signataires et la direction. Cette entente permettait une grande souplesse dans l'utilisation de la main-d'œuvre et la réalisation de

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À LA POINTE DU FUTUR
est publié par:

AMF
1830, rue Le Ber
Montréal (Québec) H3K 2A4
Téléphone: 399-8318
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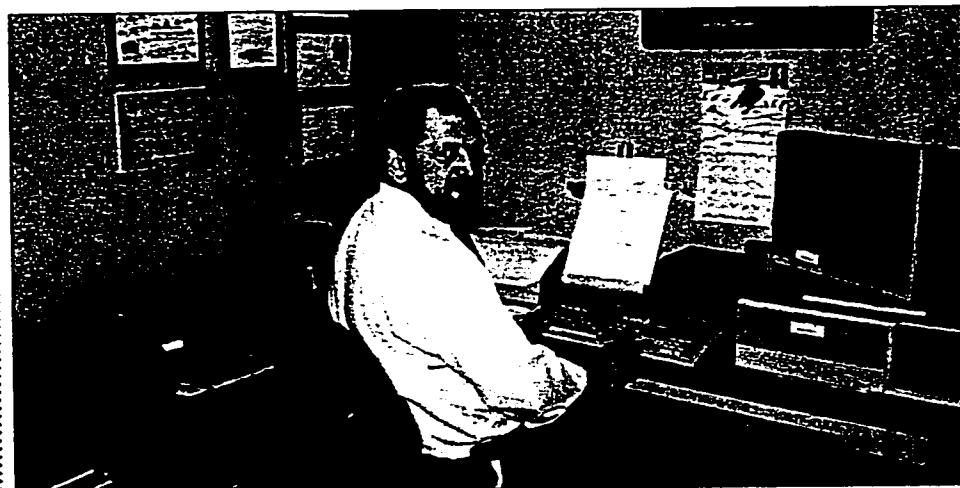
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Éditorial

Par Claude Vallières

**Nous croyons que la force de l'entreprise
repose sur un personnel qualifié,
motivé et engagé.**



Claude Vallières, coordonnateur de la formation

En janvier 1992, AMF prenait un virage à 180° et entraînait de plein pied dans le jeu de la concurrence. Ce changement nous conduit à étudier notre activité à la lumière de la conquête du marché international. Il exige aussi que soit mis en place un plan de formation susceptible de soutenir la mission de l'entreprise. Ainsi notre industrie a pu accepter le contrat du métro de Montréal et dernièrement, elle créait une Division d'autocars. La diversité de nos contrats exigeait que la formation, chez nous, soit à la fine pointe du progrès.

La formation permet d'acquérir les connaissances fondamentales, elle fait évoluer nos comportements et elle donne à nos habiletés des appuis plus solides et étendus. Parmi les aspects que recherche notre programmation de formation continue, nous trouvons aux premiers rangs celui de la qualité et de l'accroissement de la productivité.

Au cours des derniers mois, nos efforts de formation ont surtout porté sur les secteurs de la soudure, de l'informatique de même que de la formation du personnel de supervision. Le champ de la formation est vaste, c'est par lui que passe l'obtention d'une main-d'œuvre hautement qualifiée et capable de relever tous les défis qui s'annoncent.

Dans l'année qui vient, nous continuerons à mettre l'accent sur la formation professionnelle. Des réunions sont d'ailleurs prévues avec les directeurs de secteurs et les représentants ouvriers afin de mieux comprendre les besoins spécifiques; notre programme encourage, il va s'en dire, la participation du personnel dans l'atteinte de nos objectifs de formation.

La force de l'entreprise repose, nous le répétons, sur un personnel qualifié, motivé et engagé.



Mot du président

Fier d'y être
AMF
Fier d'en être

Chez AMF on est **FIER D'Y ÊTRE et FIER D'EN ÊTRE**

L'année 92 aura été marquante pour AMF et, laissez-moi vous dire, à plus d'un point de vue. Même si, à côté de nous, on entendait parler de récession, de mises à pied, de chômage, chez nous, on a voulu indépendamment de cette conjoncture, aller de l'avant et développer nos programmes. Notre ouverture franche et ouverte envers les syndicats a sans aucun doute été un de nos atouts pour atteindre les objectifs de viabilité et de prospérité.

Depuis trois ans, nos relations patronales-ouvrières ont constamment évolué menant l'entreprise sur la voie des relations harmonieuses. Les syndicats ont compris et cheminé avec nous pendant la période de transition sachant que le coude à coude donnerait de bien meilleurs résultats. Nous avons travaillé à formuler des objectifs communs et nous travaillons maintenant dans un véritable esprit de partenariat. D'ailleurs, les exemples de partenariat se sont multipliés en 1992 que ce soit pour le projet du métro, celui des autocars, lors des expositions aux États-Unis et pour des visites politiques ou avec des clients. L'engagement des syndicats dans la recherche du succès pour l'entreprise AMF est donc réel et a contribué dans une large partie à

l'élan nouveau qui existe dans notre entreprise.

Mon désir le plus grand est de soutenir cette lancée et d'encourager tous les cadres, en partant de la haute direction jusqu'au cadre de premier niveau, à travailler et entretenir concrètement, sur le plancher, des rapports syndicaux patronaux qui favorisent une collaboration étroite et totale. Je m'engage à maintenir le cap dans cette direction malgré les écueils qui nous guettent. La richesse principale de notre entreprise réside dans ses ressources humaines et les syndicats sont un apport efficace pour l'équipe d'AMF.

Si nous voulons si ardemment qu'AMF prospère, c'est parce que nous comprenons qu'il faut que cela soit vrai aussi pour chacune de nos personnes qui y travaillent. Nous avons effectué la transition, d'une gestion autoritaire et intraitable à une gestion harmonieuse et participative, et parce que nous visions la coopération, nous l'avons obtenue.

Je ferai en sorte que l'on continue à appliquer ces nouvelles valeurs.

Fausto C. Levy

Eva Saganash

Δ L ~ = 6 C ~



Je suis née sur l'île de Waswanipi, près du barrage LG3 au Nouveau-Québec. Dans la réserve indienne où j'ai grandi, on parle encore couramment la langue crie. J'ai suivi mes cours primaire et secondaire à l'école Sault Sainte-Marie (Ontario) en anglais, qui était la langue d'enseignement obligatoire à cette époque. Cependant, les jeunes peuvent maintenant étudier en anglais, français et cri.

Le peuple amérindien serait originaire de la Mongolie mais plus

probablement de l'Amérique du Sud d'où il aurait graduellement émigré vers le nord. Dans mon enfance, nous vivions de chasse et de pêche. Mes parents chassent encore aujourd'hui de façon nomade, mais un nombre croissant d'Amérindiens poursuivent des études pour se qualifier en vue d'occuper des emplois de bureau ou dans d'autres domaines spécialisés.

Je suis entrée au CN le 5 juin 1972 après avoir complété mon cours commercial au Business College Willis à Ottawa. J'ai, par la suite, suivi des cours de perfectionnement en WordPerfect et Lotus au Collège

O'Sullivan, à l'Université McGill et au Cégep André Laurendeau. J'ai occupé différents postes et effectué plusieurs stages pendant quatre ans pour ensuite prendre deux années sabbatiques. Je suis revenue au CN le 26 mars 1979 et j'ai travaillé aux Achats puis en comptabilité, poste que j'occupe encore aujourd'hui.

Grâce à une subvention du programme d'éducation du Cree School Board Office of Waswanipi, je m'apprete à suivre un cours intensif en bureautique d'une durée de six mois à l'Institut Herzing, pour revenir à AMF pour encore, je l'espère, plusieurs belles années !

La Division des autocars d'AMF est née

Suite de la page couverture

la nouvelle ligne de montage d'autocars.

Fausto Levy, Pdg d'AMF, faisait remarquer, lors de la signature du contrat, que le succès du projet reposait en grande partie sur l'engagement créatif de tout le personnel. Il annonçait aussi la nomination de George Aslanian au poste de Directeur de la Division d'autocars d'AMF.

Celui-ci a déjà mis en branle la machine et dès le 25 janvier débutaient au Complexe Nord les travaux sur le prototype.

George Aslanian
directeur de
la division



Faits à noter

Suite de la page 6

des perspectives d'avenir de l'entreprise. Ghislain Girardin, quant à lui, s'est attaché principalement à informer l'auditoire des avantages du monorail.

■ M. François Raynald, attaché politique du ministre Ciaccia (Affaires internationales du Québec) a reçu, à son bureau, le directeur des affaires gouvernementales d'AMF. C'était le 22 décembre. Ghislain Girardin a écouté l'attaché politique lui parler des pays où le Québec est présent et il a profité de l'entrevue pour entretenir le haut fonctionnaire des projets d'AMF. Une visite de l'entreprise pourrait bien avoir lieu avec le ministre Ciaccia au début de l'année.

POINT TO THE FUTURE



AMF Employee Magazine
January – February 1993

Volume 7 nº 1

The AMF bus division is born!

December 23, 1992, will go down as an important date in AMF history. It's the date when AMF signed the contract that allowed it to create a new bus remanufacturing division.



Brett Schlossberg, Esq., Fausto C. Lrey, Georg W. Paffrath

AMF purchased the assets and technology of American firm CAP A BUS, located in Salado, Texas. The latter has developed truly original ideas in bus manufacturing, but was no longer able to meet the demand given the size of its facilities. According to AMF Research and Development, we will be able to improve the quality of their product and production methods,

while they, in turn, will benefit from facilities which will enable them to optimize their workers' skills. We truly believe that AMF will deliver a value-added product.

A team of people from Marketing, Production, and Research and Development did the legwork (including the market study) which led to the signing of

the contract. But all the work accomplished by the team would have been in vain were it not for the agreement reached between the unions and management. This agreement gave management the flexibility needed to make a go of the new bus division.

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POINT TO THE FUTURE

is published by:

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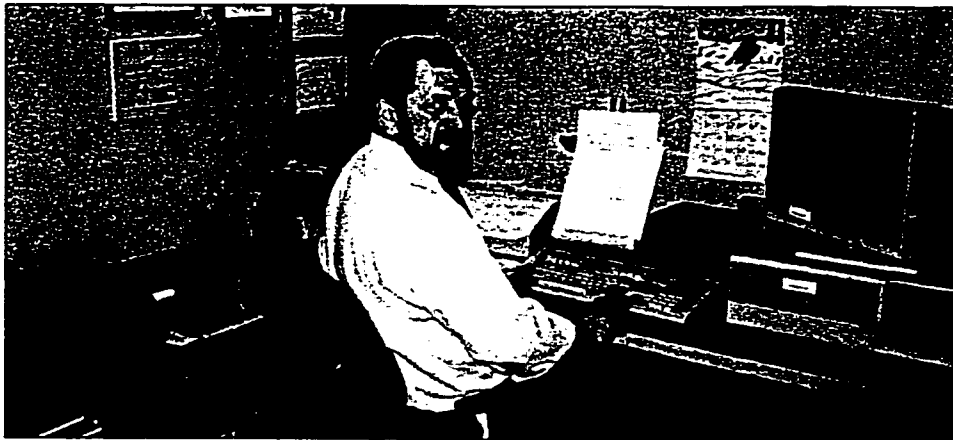
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2,100 copies of this issue were printed.
POINT TO THE FUTURE is published
six times a year.

Editorial

By Claude Vallières

We believe that the strength of the company depends on our having a qualified, motivated, and committed work force.



Claude Vallières, Training Coordinator

In January 1992, AMF made a 180° turn and jumped into the competitive marketplace. This change meant taking a close look at the way we do business so that we could compete effectively. It also meant setting up a training program to support AMF's mission. These efforts enabled us to land the Montreal métro contract, and more recently, a contract to remanufacture buses. Our contracts are diverse, and the training we offer must keep pace with customer requirements and new technologies.

Training allows us to acquire fundamental knowledge. It changes our behaviour, and enables us to perfect and upgrade our existing skills. Our training program focuses on two highly important factors - quality and improving productivity.

Over the past few months we have had to concentrate our training efforts on welding, computers, and supervisor training. There are many other fields where training is required in order to develop a highly skilled work force capable of meeting today's and tomorrow's challenges.

We will continue our training efforts in the coming year. Meetings are already planned with area managers and worker representatives in order to identify specific training needs. Needless to say our training program encourages the participation of all employees in achieving our training goals.

Again, the strength of the company depends on our having a qualified, motivated, and committed work force.



President's Message

AMF — proud to be in it, proud to be part of it

The year just ended was a turning point for AMF in more ways than one. While talk of the recession, layoffs, and unemployment continued to make the headlines, we forged ahead with new programs and initiatives. Our frank and open dialogue with the unions was certainly instrumental in getting us on the track to viability and profitability.

Labour-management relations have improved continuously over the past three years. The unions lent their full support during the transition period knowing that the changes that were taking place were in the best interests of the workers. Labour and management have established common objectives, and have forged a true working partnership. The results of this partnership were abundant in 1992 -the Métro project, the bus project, joint representation at key US trade shows, and during tours of the facility by customers and political dignitaries. The unions have shown a true commitment to making AMF a viable enterprise, and are greatly responsi-

ble for the new spirit of optimism within the Company.

It is my fervent hope that we can continue this partnership, and I urge all managers, from first line supervisors to senior management, to make concrete efforts on the floor to pursue harmonious labour-management cooperation. I promise to steer in this direction despite whatever stumbling blocks we may encounter.

Human resources are the Company's most valuable asset, and the unions that represent them are valued contributors.

It is not enough to just say that we want AMF to succeed, each one of us must work toward this goal in order for it to happen. We have made the transition from an authoritarian and inflexible style of management to a harmonious and participative style. I will do my utmost to ensure that we continue along these lines.

Fausto C. Levy

Proud to be in it
AMF
Proud to be part of it

Eva Saganash

Δ L ~ 6 C ~



I was born on Waswanipi Island, near the LG3 dam in New Quebec. People still speak Cree on the reserve where I grew up. I completed my elementary and secondary schooling at Sault Ste. Marie School in English, which was then the mandatory language of instruction. Young people today can study in English, French, and Cree.

Native people are said to have originally come from Mongolia, but it is more likely that we came from

South America, gradually migrating north. We lived by hunting and fishing when I was growing up, and my parents are still nomadic hunters today. More and more Native people, however, are getting an education to obtain office jobs and enter specialized fields.

I began working for CN on June 5, 1972, after completing business courses at the Willis Business College in Ottawa. I have since taken courses in WordPerfect and Lotus at O'Sullivan College, McGill University, and the André

Laurendeau Cégep. During my first four years at CN, I held various positions and completed several training programs, and then took two years off. I returned to CN on March 26, 1979, and went to work at Purchases, and later moved to Accounting where I work today.

Thanks to an education grant from the Cree School Board of Waswanipi, I plan to take an intensive, six-month course in office technology at the Herzing Institute. After that I hope to come back to AMF for many more happy years.

The AMF bus division is born!

Continued from page 1

Fausto Levy, President and General Manager, told those present at the contract signing that the success of the project depended largely on the creativity and commitment of everyone at AMF. He also announced the appointment of George Aslanian as manager of the AMF bus division. Mr. Aslanian and his team have been hard at work. Manufacturing commenced on January 25th on the North Complex.

George Aslanian

manager
of the
AMF bus
division



Notes of Interest

Continued from page 6

talked about the new AMF and its future. Ghislain Girardin, for his part, spoke to the assembly about the advantages of a monorail system.

■ Françoise Raynald, attaché to the Quebec Minister of International Affairs, Mr. John Ciaccia, welcomed our director of governmental affairs, Ghislain Girardin to his office last December 22. They discussed Quebec's international commitments, and Mr. Girardin took the opportunity to update Mr. Raynald on AMF's activities. Mr. Ciaccia might visit the facility in the near future.

APPENDIX XII

Copies of *Inforum* Articles

Un nouveau directeur relève le défi des télécommunications

Sameh Fahmy, le nouveau directeur des télécommunications des SI, a une mission. Fort de son expérience, de son orientation résultats et de sa vision du succès, il entend relever le défi des télécommunications au CN. Lors d'une récente entrevue, nous lui avons demandé comment il voit son nouveau rôle et quels sont ses projets pour les télécommunications.

Q. Sameh, pouvez-vous nous parler de votre cheminement professionnel?

R. Je suis dans le domaine des télécommunications et des SI depuis 21 ans. J'ai travaillé dans diverses entreprises au Canada et aux États-Unis. J'ai commencé ma carrière comme informaticien chez IBM Canada, à Montréal, à la fin de mes études en génie. J'ai passé quelque temps à Washington, à l'AAR et chez AMTRAK. Je suis entré au CN en 1981, aux Services de gestion. Puis, je suis allé travailler chez Travelers, au Connecticut, en tant qu'Associate Director of Host Planning and Performance (directeur associé de la planification et de la performance de l'ordinateur central). En 1987, je suis revenu à Montréal travailler aux Caisses populaires Desjardins où j'ai été, pendant trois ans, directeur de l'Ingénierie puis, pendant quatre ans, directeur des Télécommunications.

Pendant quatre ans, au moment où j'étais informaticien chez IBM, j'ai été affecté au compte CN. Pendant quatre ans également, j'ai été employé du CN. Je compte 12 années d'expérience ferroviaire en quelque sorte.

Q. Vous avez travaillé aux Systèmes d'information pendant quatre ans avant de quitter le CN en 1985. Pourquoi avez-vous choisi d'y revenir et d'accepter le poste de directeur des Télécommunications?



R. Je suis revenu au CN parce que j'aime énormément y travailler. J'aime l'ambiance familiale qui y règne. Je pense que c'est une excellente entreprise. À la base, je crois que le CN est comme un bureau d'ingénieurs en raison de la nature de ses activités, c'est-à-dire le ferroviaire. Je crois que le CN possède un énorme potentiel. Cela est aussi très vrai du domaine des télécommunications. Lorsqu'on m'a parlé de mon nouveau poste, j'ai été surpris d'entendre dire que le CN consacrait, chaque année, 83 millions de dollars aux télécommunications. Ce qui m'a beaucoup intéressé aussi, c'est le fait que les télécommunications constituent, au CN, une partie intégrante et primordiale de l'exploitation même.

Il y a énormément à faire dans ce domaine, car les télécommunications sont actuellement morcelées au CN. Les domaines téléphonie et systèmes de données sont dissociés. Du côté des systèmes de données, les télécommunications directement associées au contrôle des trains sont distinctes de celles qui sont davantage apparentées aux SI. Il existe même une séparation entre les télécommunications reliées aux logiciels et celles qui concernent le matériel informatique. Comme on le voit, il y a beaucoup à faire pour améliorer l'infrastructure et mettre en place de nouvelles techniques qui réduiront les coûts et créeront des occasions d'affaires pour l'Exploitation et le Marketing. Il existe aussi des possibilités

Profil personnel

Nom : Sameh Fahmy
Lieu de naissance : Le Caire, Égypte
Situation de famille : Marié
Nombre d'enfants : 4
Passe-temps/intérêts : Histoire, soccer
Langues parlées : Anglais, français, arabe
Scolarité : M.B.A., McGill, 1983
Bacc. en génie électrique, McGill, 1973
CGA (comptable général agréé), Fin prévue : juin 1995
Lieu de travail : Siège social, 5^e étage
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de négociation avec les fournisseurs en raison de la taille même de notre entreprise. Toutes ces occasions sont formidables sur le plan de l'infrastructure. Il y a aussi la possibilité, au point de vue service à la clientèle, d'aller chercher de nouveaux outils pour la gestion des stocks, la gestion des configurations et le diagnostic à distance. Ces outils peuvent aider à déterminer les problèmes, améliorer les configurations optimales et accroître la productivité globale tout en augmentant la satisfaction de la clientèle parce que nous serons plus attentifs à ses besoins.

Q. Quel sera votre grand objectif en tant que nouveau directeur des Télécommunications aux SI?

R. Avant tout, m'assurer que les télécommunications sont pleinement exploitées à l'avantage du CN. Il nous faut évidemment des moyens pour réaliser cet objectif, mais je pense que cela est secondaire. Je dois d'abord élaborer un plan stratégique pour les télécommunications. Et j'espère le faire d'ici le début de septembre. Nous avons déjà constitué un groupe qui compte des représentants du service S et C, de la Téléphonie, des SI et de fournisseurs comme Bell. Nous sommes aussi ouverts à tout autre groupe qui aimerait participer à nos travaux. Une fois établi le plan des télécommunications, il faudra l'articuler en fonction du plan d'entreprise. Il faut

donc que nous connaissions et comprenions bien le contenu des plans commerciaux du CN et ensuite que nous essayions d'optimiser l'utilisation de nouvelles techniques dans les télécommunications pour répondre à ces plans commerciaux. Après avoir présenté ce plan, nous mettrons de l'avant une série de plans d'action à appliquer. Il faut évidemment que nous trouvions des fonds pour réaliser ces plans en comprimant les coûts dans certains domaines. Les remises consenties par les fournisseurs, de même que les modifications à l'infrastructure qui découlent des consolidations peuvent faciliter le financement de nouvelles techniques permettant de réduire la durée des pannes de trains, ou encore susciter la mise en place de nouvelles installations qui donneront au CN un avantage concurrentiel d'un point de vue marketing.

J'ai élaboré des plans stratégiques lorsque j'étais chez Desjardins. Nous faisons un plan chaque année. En fait, nous avons élaboré le tout premier plan de télécommunications parce qu'il s'imposait. Ce plan a tout remis en ordre. Pour répondre à votre première question au sujet des moyens et de l'organisation, je vous dirai que nous y verrons clair une fois que nous aurons un plan stratégique. Le plan stratégique sera concret, et il aura une orientation commerciale, technique et financière. Il portera aussi sur la période de transition et prévoira les capitaux nécessaires. Au lieu de consacrer beaucoup de temps au processus, ce qui pourrait prendre un temps fou, je m'attaquerai au travail même, car c'est ce qui compte vraiment.

Q. Que pouvez-vous nous dire sur l'organisation de votre groupe?

R. Je commencerai par donner suite à la recommandation présentée au Comité consultatif sur les réseaux (CCR) le 22 avril, puis j'examinerai l'organisation et les processus de travail afin d'assurer le meilleur service possible à notre clientèle interne et externe. Disons brièvement qu'il y aura un groupe en télécommunications, qui sera composé d'un petit module de planification appelé

Développement des services et d'un autre module, appelé Services aux usagers, qui sera orienté vers les ordinateurs personnels, le soutien, l'installation et les modifications au réseau. Le groupe relèvera directement de moi.

Nous adopterons également une structure hiérarchique de type matriciel pour les deux fonctions d'aide, soit le MNS au service S et C, et le CTD à l'ERI. Il y aura aussi une organisation matricielle pour le groupe Ingénierie, qui appartient au service S et C. Nous suivrons exactement ce qui a été convenu par tous les groupes. Nous transférerons les budgets dont nous avons convenu. Les budgets téléphonie et systèmes de données seront intégrés à ceux des SI. Certains

budgets, en particulier ceux des régions, demeureront où ils se trouvent. Nous ferons le suivi des recommandations formulées par le Comité.

Dans l'ensemble, l'organisation est déjà en place. Au total, notre groupe compte 44 personnes. Il y a les Services aux usagers (équipe de Réjean Daigle) qui relevaient auparavant de Jim Bright ; la Planification, qui comprend trois planificateurs, soit Doug Paulette, John Meddings et Marg MacIsaac, également de l'ancienne équipe de Jim Bright ; Joe Hébert de S et C, Jean Roger de l'Administration et Carlos Da Roza, de l'équipe de Bill Burrington, qui s'occupe d'architecture.

Je crois que nous avons un groupe de service à la clientèle très intéressant et que le personnel de planification en sera le pivot.
(Voir l'organigramme p. 5).

L'essentiel, pour l'instant, est d'améliorer le service à la clientèle pour les réseaux locaux en accélérant les travaux d'installation et en fournissant à la clientèle des accords sur les niveaux de service afin que les attentes soient bien comprises.

Q. Quels sont ceux qui travailleront ensemble?

R. Le service S et C et les régions. Je veux m'assurer que le plan stratégique que j'établirai couvrira tout ce qui importe pour tout le monde. Je le soumettrai à tous les intéressés avant de le présenter. Mais je ne m'attarderai pas aux structures et aux services, etc. Je m'attends d'ailleurs à ce que les autres services m'aident énormément à dresser mon plan.

J'ai aussi hâte de rencontrer Gerald Davies et Jack McBain pour mieux comprendre leurs objectifs. Pour cibler des clients particuliers, il faut les connaître et les gêner. Si vous avez moins de clients, mais que ceux-ci soient rentables, il faut que vous en preniez soin. Comment mettre à leur disposition les outils qui vont simplifier leur exploitation commerciale?

Q. D'après vous, quel sera votre plus grand défi ou votre plus grand obstacle au moment de créer ou de mettre en oeuvre un plan stratégique pour les télécommunications?

Le plan : «Au lieu de consacrer beaucoup de temps au processus, ce qui pourrait prendre un temps fou, je m'attaquerai au travail même, car c'est ce qui compte vraiment...»

La cible : «L'essentiel, pour l'instant, est d'améliorer le service à la clientèle pour les réseaux locaux en accélérant les travaux d'installation et en fournissant à la clientèle des accords sur les niveaux de service afin que les attentes soient bien comprises.»

R. Honnêtement, je n'entrevois aucun obstacle. Chez Desjardins, j'ai créé le service des télécommunications de toutes pièces. C'était très morcelé. Ce qu'il y a de mieux à faire, à mon avis, c'est d'établir une vision et de la suivre en faisant preuve de compétence et en se concentrant sur les résultats. Si vous dites que dans trois mois, six mois ou neuf mois, vous aurez réalisé des économies de tant de millions de dollars et que vous aurez mis sur pied des infrastructures évolutives afin que l'entreprise fonctionne mieux, que ce soit au marketing ou à l'exploitation du chemin de fer, on vous donnera évidemment une chance. Vous aurez le feu vert, car les résultats susciteront énormément d'intérêt. Si vous tenez parole, vous établissez une crédibilité et alors tout va de soi. Le service qu'on a établi chez Desjardins était énormément respecté à l'intérieur comme à l'extérieur. Il était très compétent, très efficace et très évolué d'un point de vue technique. Il était respecté partout, et c'est ce que j'ai l'intention de faire ici.

Q. Entrevoyez-vous quelques problèmes du côté des régions?

R. J'ai connu auparavant des difficultés qui, j'en suis certain, étaient pires que ce qui peut arriver dans les régions. Les Caisses populaires sont des coopératives. Il y avait 14 fédérations régionales, dont 11 au Québec, une en Ontario, une au Manitoba et une au Nouveau-Brunswick. La direction générale n'avait absolument aucune autorité, car il s'agissait d'une coopérative. En fait, les fédérations siégeaient au conseil d'administration. Les Caisses étaient des entités complètement autonomes. Ce qu'il faut faire, dans un tel environnement, c'est de faire intervenir sa compétence et sa crédibilité et de

produire des résultats concrets plutôt que de perdre du temps à discuter du partage des tâches. Le plus simple est de prêcher par l'exemple et de viser des résultats concrets. Les gens n'acceptent de travailler avec vous que si vous les aidez. Le CN devrait être un milieu plus facile puisqu'il ne s'agit pas d'une coopérative.

Q. Avez-vous défini les grandes lignes de votre plan stratégique?

R. Je crois qu'il est très important de faire avancer les choses. De nombreuses personnes travaillent au Comité des télécommunications depuis un bon bout de temps. Il y a maintenant un directeur des Télécommunications. Si nous

nous traînons les pieds et prenons jusqu'à Noël pour établir des plans concrets, je crois que nous briserons notre élan. Je pense que nous avons maintenant un bon rythme et que si nous voulons le garder, nous devons terminer ce plan pour septembre.

Je connais les grandes lignes du plan stratégique. Elles sont assez classiques. On commence avec des objectifs dont certains sont aussi axés sur l'exploitation. Par exemple, maintenir et améliorer la disponibilité du réseau, améliorer la performance en matière de temps de réponse, satisfaire les besoins commerciaux, et réduire les coûts. Ces objectifs se retrouvent dans tout plan de télécommunications. Nous pouvons les préciser en adaptant le plan à des objectifs particuliers du CN, par exemple fournir un soutien à l'Objectif fiabilité. Ensuite, nous devons regarder la situation actuelle, ses forces et ses faiblesses. Il y a deux volets à cela : l'infrastructure et les fonctions dépannage et services à la clientèle. Nous envisagerons de nouveaux éléments d'un point de vue commercial et d'un point de vue technique qui influenceront sur la situation actuelle. Nous établirons une cible et des plans de transition. Le dernier aspect du plan concerne les capitaux. De quels investissements aurons-nous besoin, de quels rendements, etc.?

Ce qui est fascinant du CN, c'est que, quels que soient vos résultats, ils ont une incidence directe absolue sur l'entreprise. Si les trains cessent de rouler, tout s'arrête. Au CN, il n'y a pas de limite technique, car il y a énormément de choses concrètes. Quand vous êtes dans une institution financière, qu'elle oeuvre dans le domaine bancaire ou dans celui de l'assurance, vous composez avec des facteurs sur papier, vous débitez et vous créditez des comptes. Même chose avec les polices d'assurance. Au CN, tout est concret. Vous traitez de locomotives, de wagons, de rails, etc. Il me semble qu'il faut travailler pas mal fort pour faire de l'argent. C'est beaucoup de travail mais là encore, c'est ce qui rend le CN si intéressant.

Q. Avez-vous constaté des changements au CN depuis la période où vous y étiez, au début des années 1980?

R. Oui, des changements énormes. Le CN est devenu un milieu très dynamique. Il est évident que le président est très axé sur les affaires. Il y a beaucoup d'impatience. On veut que les choses se fassent tout de suite, ce qui est très rafraîchissant. J'aime travailler dans un milieu qui vise à atteindre rapidement

des résultats. Je sais que Ronan est très dynamique et qu'il est axé sur le concret. J'ai aussi remarqué que les gens de son service aiment travailler avec lui. C'est lui qui m'a convaincu d'accepter le poste, et je voulais vraiment travailler pour lui. L'équipe SI est une équipe formidable. La

direction est très forte et forme une équipe dont les membres se complètent bien. La territorialité n'existe pas, et cela facilite beaucoup la collaboration. Les choses ont incontestablement beaucoup changé.

L'Objectif fiabilité est un projet très impressionnant. C'est un investissement pour l'avenir. C'est formidable qu'on ait eu ce type de vision et qu'on ait pu dégager les fonds nécessaires en pleine période de rationalisation.

Je me suis renseigné auprès de fournisseurs sur ce qui se passait au CN et ils m'ont dit que le CN avait beaucoup changé. Le CN a une orientation beaucoup plus commerciale qu'auparavant. Lorsque je suis parti, il était uniquement axé

sur les coûts. Il est bon d'essayer d'économiser. Mais il est également important de considérer les avantages découlant d'investissements dans les nouvelles techniques, qu'il s'agisse d'augmenter la part de marché ou de réduire les coûts ferroviaires, par exemple.

De plus, le CN a beaucoup rationalisé son exploitation. Et on sait que tout ce qui est léger s'élève haut.

Je trouve tous ces projets très stimulants. Plus le défi est grand, plus la satisfaction est grande. Je suis littéralement emballé par le défi à relever au CN.

Les obstacles : *«Le plus simple est de prêcher par l'exemple et de viser des résultats concrets. Les gens n'acceptent de travailler avec vous que si vous les aidez.»*

Le changement : *«On veut que les choses se fassent tout de suite, ce qui est très rafraîchissant. J'aime travailler dans un milieu qui vise à atteindre rapidement des résultats. C'est Ronan qui m'a convaincu d'accepter le poste, et je voulais vraiment travailler pour lui.»*

L'Objectif fiabilité : *«L'Objectif fiabilité est un projet très impressionnant. C'est formidable qu'on ait eu ce type de vision et qu'on ait pu dégager les fonds nécessaires en pleine période de rationalisation.»*

Q. Ronan, pouvez-vous nous donner des nouvelles de l'étude réalisée récemment sur les SI par le Consortium IBM?

R. Laissez-moi d'abord vous expliquer ce qu'est l'étude du Consortium IBM. Chaque année, IBM invite 26 entreprises de partout dans le monde à prendre part à cette étude. Des compagnies comme Union Pacific et Toyota ont été invitées cette année à y participer. Le Consortium IBM évalue les activités informatiques de chaque entreprise participante et les classe en fonction des meilleures pratiques. C'est en quelque sorte les Jeux olympiques de l'industrie informatique. Il s'agit en fait de l'analyse comparative la plus exigeante qui soit.

Nous participons à cette étude parce que je veux que nous comprenions ce qu'il faut avoir pour atteindre la classe mondiale, pour être un centre d'excellence, pour être la meilleure fonction SI possible. Compte tenu de notre volume d'activités, j'estime qu'il est important que nous prenions la peine de vérifier si notre orientation convient à l'entreprise et si nous sommes tous et toutes sur la bonne voie. Il importe que nous nous assurions que tous nos efforts sont justifiés, stratégiquement parlant.

Le processus est très exigeant et les points de référence, très élevés. Je ne me fais donc pas d'illusions pour notre première participation à cette étude. Je ne crois pas que nous remportions la première place. Cependant, le simple fait que le CN ait été invité à participer à l'étude indique déjà que nous disposons d'un important niveau de compétence. Nous ne cherchons donc pas à savoir si nous sommes bons, mais bien comment nous pouvons exceller et ce qu'il faut pour y arriver.

L'analyse comparative s'intéresse essentiellement à la stratégie commerciale de l'entreprise participante et essaie de déterminer dans quelle mesure la technologie de l'information est adaptée à sa stratégie et à sa culture, pour voir si le service informatique s'acquitte bien de son rôle, s'il est bien en harmonie avec la clientèle et s'il rend bien à l'entreprise la valeur attendue. Dans le cadre de cette étude, IBM a interviewé plusieurs personnes, autant des Systèmes d'information que de l'extérieur, ainsi que Jack McBain et Gerald Davies.

Nous avons reçu un premier rapport contenant les données brutes, et nous en étudions actuellement le contenu. À mesure

que nous progresserons dans cette tâche, nous vous transmettrons le résultat de nos découvertes et réflexions. Disons brièvement qu'IBM estime que nous avons fait d'énormes progrès, mais que nous n'avons pas encore atteint la classe mondiale. Nous allons établir des priorités en retenant les points susceptibles de procurer à la Compagnie les meilleurs résultats possible. Nous ignorons toutefois pour le moment comment nous nous situons par rapport aux autres compagnies, car l'analyse comparative se poursuit. Vers la fin octobre, toutes les analyses comparatives seront terminées. Les chefs d'entreprise ou les vice-présidents Informatique des entreprises participantes se réuniront pendant quelques jours pour comparer leurs résultats et connaître leur classement (de 1 à 26) dans chaque catégorie.

Il est clair que le processus est exigeant. L'objectif est de s'assurer que nous réalisons notre plein potentiel. Je suis conscient du fait que les Systèmes d'information sont soumis à d'énormes pressions et que la valeur de leur contribution est déjà élevée. Mais une partie de notre efficacité future dépendra de la qualité de notre planification à long terme, de ce que nous faisons pour être aussi proactifs que possible. Il est évident

qu'il s'agit là d'un processus d'amélioration continue. Aucune entreprise ne peut se vanter d'être de classe mondiale dans toutes les activités. Aucune entreprise n'occupe la première ou la dernière place dans toutes les activités. Il nous reste à savoir où nous nous situons. Les décisions que nous prendrons à la suite de cette analyse auront été mûrement discutées à l'interne. J'ai l'intention de préparer un résumé de la situation dès que notre étude du document sera terminée. Nous avons déjà rencontré des représentants d'IBM pour obtenir des éclaircissements au sujet du rapport. Lorsque nous aurons un exemplaire du rapport définitif, nous le distribuerons et nous nous assurerons que tout le personnel des SI y a accès.

Nous participons à cette étude parce que je veux que nous comprenions ce qu'il faut avoir pour atteindre la classe mondiale, pour être un centre d'excellence, pour être la meilleure fonction SI possible.

Nous ne cherchons donc pas à savoir si nous sommes bons, mais bien comment nous pouvons exceller et ce qu'il faut pour y arriver.



«Nous participons à cette étude parce que je veux que nous comprenions ce qu'il faut avoir pour atteindre la classe mondiale, pour être un centre d'excellence, pour être la meilleure fonction SI possible.»

CEO gives first departmental address to IS

On January 20, 1994, IS was given a great opportunity to meet with Mr. Paul Tellier, our CEO, to hear what he had to say about our department and our contribution to CN and to meet with Ronan McGrath and IS directors who were present to discuss IS's objectives for 1994.

It was a great feeling to hear all the positive things Mr. Tellier felt about our role and our future. To quote Mr. Tellier, "Information Systems is at the core of every CN business strategy for 1994. In terms of customer commitment and service reliability, I am extremely aware of your contribution to CN's success." But he also emphasized the need to accelerate the pace of change in order to meet corporate goals and to turn CN around. The corporate goals for the year include total customer focus, increased revenues, reduced costs, and a motivated and well-trained workforce.

As we are all well aware, SRS is the key contribution IS is making to help CN meet its objectives. But there are also eight major projects as well as 40 other medium to small projects that IS is working on that are also contributing to CN's success. As Mr. McGrath, VP IS and Acct. Svcs., added, "This is not a backroom function. This is a strategic resource and a core of the company. We have set some high expectations for the year. You are doing a superb job. We are all under pressure, you, me, and Mr. Tellier. The company is under pressure because of profitability, and the key to success is in this room."



We are fortunate in IS to have an Executive that is committed to communicating goals and directives and to ensure that we all understand our game plan for the year ahead. We are leaders in many areas, and we are leading the way in this area as well. If you have any comments or suggestions on how we can improve this type of event, or if you missed the meeting and are interested in viewing the video please contact:

A.M. Del Torto at 6950 or E-mail: Deltor02.



Tête-à-tête with our VP

This is the second in a series of quarterly interviews conducted with Ronan McGrath to find out his views on corporate activities and how they affect our department.



Q. Metrics and measurements have become a popular topic over the last few months. Can you tell us why we are shifting towards measurements, why they are so important?

A. Information Systems sits in the centre of a large number of corporate strategies. IS plays a role whether we talk re-engineering, job consolidation, new customer service, SRS, or new types of information or technologies. The issue we face is allocation of resources as there will always be more demand than supply for resources. The issue is how do we take a valuable resource, allocate it properly, and then ensure that we are getting value for that allocation. In other words, that we are using this scarce resource in the best possible way.

Our internal customers have tremendous needs as do our external customers. Because of the critical nature of IS, we have to be able to measure what our product is. There are a variety of reasons why we want to do that. First, to set realistic expectations. In other words, over time for IS to deliver what it promises, when it promises, and how it promises. Secondly, to ensure that we have early warnings of off-plan conditions. When IS plans fail to execute on time there are other dependencies. It's not just Information Systems that has the problem. It's the ultimate function that commissioned that system that has problems with executing on its plans. Therefore, what we deliver affects a great many more people than ourselves. We have therefore got to be in a position where we have clear objectives and the ability to measure achievements

against them. This will give us a tool to correct problem areas; it gives us a tool to recognize exceptional performance; it gives us an early warning of problems; and it also allows us to better allocate resources as we see projects being completed, for instance. So overall, like the rest of the corporation, measurement of performance is really a way to better plan our future, to better analyze our options and so on.

We are not unique in this. The corporate world is becoming more competitive, leaner, more time-sensitive, and interdependent. For us, we have to reflect those things in our own activity. As the company becomes more customer-focused the rate at which its product in the transportation marketplace chain develops will accelerate. As a result, the demand on us will grow. Since we cannot be all things to all people we have to have a very quantifiable handle on what it is we are doing and what it is we can change. So the measurement process gives us a significantly greater amount of information on our deadlines, our resource allocation, and so on.

Q. One of the corporate objectives that Mr. Tellier mentioned at our general meeting is total customer focus. How do you think we fare here and what do you think we can do as a department to be more customer focused.

A. Every dollar that this company makes comes from its customers. They pay for every computer terminal, they pay for every piece of software, they pay every salary. They also demand more. Our external customers are under more margin pressure than they have ever been. They will not pay for sloppy performance. As a result, the company is bringing a much greater market focus as exemplified, for example, by the appointment of Gerald Davies, a world class VP of marketing in this industry. That focus will flow not just to the ultimate customers but to all of the functions that support service.

We have got to be highly responsive to the needs of our customers. That's not to say that this function does not work hard. I believe we have a highly professional, very hard-working function. I do not have the slightest doubt that people are putting in exceptional efforts. The issue here is that we have to keep that customer focus top of mind. And part of what we are measuring in the metrics process is measurement of customer focus. This is the reason for my recent and often repeated concerns about telephones. I believe staff accessibility is an extremely important element of customer focus.

We are in the business of producing products. If you were ordering a Ford Taurus and you didn't know what kind of Ford Taurus you were going to get, or when it was delivered, or how to contact the salesperson, or whether it was going to be on spec as you ordered it, you would be a very dissatisfied customer. Well, the real element of customer focus is to see ourselves through the eyes of our customers. Our job is to set

realistic customer expectations, to meet those customer expectations, and to be accessible by those customers. These are the ways in which IS will execute and be seen to execute.

Q. Are there any other comments you'd like to make or thoughts you would like to convey to your staff regarding the CN/CP discussions?

A. From an IS perspective, our primary role is to deliver what we have planned to deliver without any diversions, SRS is a good example. As CN/CP discussions progress, we will be assessing the implications for systems. Evidently, we will be involved heavily in any business where there is a system component.

Q. What can you tell us about the Signals & Communications study? Do you expect S&C to become part of our function?

Over the years, there have been many groups involved in Telecommunications. Telecommunications straddles the line between CN Signals and Communications activity and CN Information Systems activity. It also has another element in telephones. However, these technologies are unifying into areas of technology and we see these bands being far more blurred than they have ever been before.

In the old days we had photocopiers and fax machines and telephones in one area of technology. We had PC in another area, we had mainframes in another area, and we had S&C in a final area. What's happening, and we see this everyday, Microsoft joining up with cable companies, software and telephone companies joining together, architectures emerging such as the client-server where the communications component is integral to the architecture. The general trend over the next five to ten years of downsizing significant applications to a distributed network. A significant amount of CN's costs is purchase services for telecommunications.

We have a main agreement with Operations that the telephones systems, the signaling systems, and the information systems architectures will be handled in a common fashion. To that end, we will be appointing a Director of Telecommunications within IS reporting to myself. We anticipate this to happen fairly shortly. That individual will have the responsibility for the overall planning and management of the contract of CN's communications architecture.

Secondly, Signals and Communications will continue to manage the physical plant out there, with software development much more integrated with applications will be managed within Information Systems.

This is something that is done in every other railway. We anticipate that this will give us an ability to consolidate CN's

considerable purchasing leverage, in order to achieve reductions in the cost of our communications.

Q. Would you care to share your views on the new training organization?

A. Some time ago, Louise Piche, Jack McBain and myself got together to discuss CN's training. The CEO was highly concerned that CN was delivering the right training to the right people at the right time. He was concerned that our people were adequately trained, and that we had a proper mechanism to do so. Louise commissioned an independent review of the training resources. Those training resources had resided in Operations, HR, and IS.

The consultants' report recommended that all training be unified into a single training organization. This is very commonly done and reflects the training strategies of most railroads and indeed most companies these days because training is in itself a professional activity. We reviewed this report along with HR and Operations agreed with its content.

At that point and time, an interview process was conducted with internal and external candidates and I am happy to say that Stanley Schmidt, who had previously been manager of training for Information Systems was appointed Director of Education for the entire system. Stan had done a very good job for us and I have no doubt that he will do an exceptional job as the person in charge of our entire training effort.

Our view is that this will have a positive effect on IS, because Stanley has an intimate knowledge of Information Systems itself. I think it will better leverage the IS systems because it allows a more rational prioritization of what is important. For example, SRS will be better serviced from an integrated training organization. The issue has been training effectiveness. The primary objective was not cost-cutting but effectiveness, and we believe that it will be a much more effective organization.

Première rencontre du pdg et des SI

Le 20 janvier dernier, les Systèmes d'information ont eu l'occasion de rencontrer le pdg, M. Paul Tellier, et d'écouter ce qu'il avait à dire sur eux et leur contribution au CN. Ronan McGrath et le personnel de direction des SI étaient également présents pour exposer les objectifs 1994 du service et en discuter.

Tout le personnel a été ravi d'entendre les commentaires positifs de M. Tellier sur le rôle et l'avenir des SI. Selon notre pdg, «toutes les stratégies commerciales du CN pour 1994 s'articulent autour des Systèmes d'information. Je suis tout à fait conscient, a-t-il dit, de votre contribution au succès du CN en ce qui concerne la priorité accordée à la clientèle et la fiabilité du service». Il a également souligné la nécessité d'accélérer les changements de façon que la Compagnie atteigne ses buts et opère le revirement souhaité. Les objectifs du CN pour l'année en cours comprennent une orientation client totale, l'augmentation des produits d'exploitation, la réduction des coûts ainsi que la motivation et la formation du personnel.

L'Objectif fiabilité est, comme nous le savons tous et toutes, la grande - mais non l'unique - contribution des SI à l'atteinte des objectifs poursuivis par le CN. Les SI sont également engagés dans la réalisation de huit grands projets et de 40 autres de petite ou de moyenne importance. Et, d'ajouter M. McGrath, vice-président SI et comptabilité : «Les Systèmes d'information ne travaillent pas dans l'ombre. Notre fonction est une ressource stratégique et un pivot de la Compagnie. Nos attentes pour 1994 sont élevées. Vous faites un travail extraordinaire. Nous sommes tous - M. Tellier, vous et moi - soumis à de fortes pressions. La Compagnie est soumise à des contraintes liées à la rentabilité, et son succès dépend des personnes qui se trouvent ici, dans cette pièce».



Nous avons le bonheur, aux SI, de relever d'un dirigeant qui se fait un devoir de communiquer clairement ses objectifs et ses directives, et qui veille à ce que nous comprenions tous le plan d'action qui nous guidera durant l'année. Nous sommes des chefs de file dans de nombreux domaines. Pour faire toute observation ou suggestion sur la façon d'améliorer ce type de rencontre, ou pour visionner le vidéo réalisé à cette occasion, veuillez téléphoner à Ann-Marie Del Torto au 6950 ou lui envoyer un courrier électronique à la boîte Deltor02.

Tête-à-tête avec notre vice-président

Voici la deuxième d'une série d'entrevues trimestrielles menées auprès de Ronan McGrath en vue de connaître son opinion sur les activités de la Compagnie et leurs répercussions sur notre service.



Q. Depuis quelques mois, on entend beaucoup parler de métrologie et de mesures. Pourquoi les mesures deviennent-elles si importantes?

R. Les Systèmes d'information se situent au centre d'un vaste ensemble de stratégies générales. Ils sont présents dans de nombreux domaines : ré-ingénierie, regroupement d'emplois, nouveaux services à la clientèle, Objectif fiabilité, techniques et informations nouvelles. La difficulté sera de répartir correctement nos ressources, car la demande excédera l'offre. Comment, en effet, affecter nos ressources valables de façon à en retirer une valeur sûre? En bref, comment réussir la répartition des rares ressources dont nous disposons?

Notre clientèle, tant interne qu'externe, a d'énormes besoins à combler. Nous devons, en raison de la nature primordiale des SI, pouvoir mesurer notre produit, et cela pour plusieurs raisons. D'abord, pour entretenir des attentes réalistes, notamment au sujet des délais de réalisation de nos engagements, de leur nature et de la façon dont nous nous en acquitons. Ensuite, pour être sûrs de détecter rapidement toute déviation par rapport aux plans. Lorsque les SI ratent une échéance, le problème ne se limite pas à eux, mais touche aussi le service demandeur en gênant l'exécution de ses propres plans. Ainsi, notre propre performance se répercute sur les autres. C'est pourquoi nous devons nous fixer des objectifs précis et pouvoir évaluer l'état de nos réalisations par rapport aux plans. Ce mécanisme de contrôle remplit plusieurs fonctions : il nous permet notamment de corriger les points qui font problème, nous fournit un outil pour reconnaître le rendement exceptionnel, nous prévient rapidement de la

présence de problèmes et facilite la répartition de nos ressources lorsque nos projets tirent à leur fin.

La mesure des résultats est donc pour nous - comme pour les autres services du CN, du reste - un moyen de mieux planifier l'avenir et d'examiner les choix qui s'offrent à nous.

Je précise que nous ne sommes pas les seuls dans cette situation. Le milieu des affaires se caractérise aujourd'hui par une vive concurrence, un usage judicieux des ressources, l'interdépendance et la sensibilité au temps. Les SI doivent tenir compte de ces réalités dans leur exploitation. Le fait, pour le CN, d'axer ses activités sur la clientèle accélérera le développement de ses produits sur le marché des transports. Nos services feront donc l'objet d'une demande accrue. Comme il nous est impossible de servir tout le monde à la fois, nous devons pouvoir disposer de données quantitatives sur notre travail et évaluer ce que nous pouvons changer. Ainsi donc, le processus de mesure nous donne l'heure juste en ce qui concerne nos échéances et la répartition de nos ressources, entre autres éléments.

Q. Lors de notre réunion avec lui, M. Tellier a mentionné que la Compagnie avait pour objectif, entre autres, de concentrer totalement ses activités sur le client. À votre avis, comment nous situons-nous à cet égard et que pouvons-nous faire, en tant que service, pour nous rapprocher de ce but?

R. Le CN tire tous ses produits d'exploitation de sa clientèle. Le client paie nos ordinateurs, nos logiciels et nos salaires. Mais il exige aussi davantage qu'auparavant. Plus que jamais, les marges bénéficiaires de nos clients externes sont soumises à de fortes pressions. Et ils ne peuvent accepter de leurs fournisseurs des services de qualité médiocre. Cela explique pourquoi la Compagnie concentre ses activités sur les marchés. À preuve, la nomination de Gerald Davies, vice-président marketing de grande envergure. Cette nouvelle orientation ne touchera pas seulement l'utilisateur ultime, mais également l'ensemble des fonctions de soutien du service à la clientèle.

Nous devons être très attentifs aux besoins de nos clients. Je ne veux pas dire par là que le personnel n'abat pas une besogne considérable. J'estime que nos gens sont d'un calibre hautement professionnel et qu'ils travaillent avec cœur et énergie. Je ne doute nullement qu'ils fournissent un rendement exceptionnel. Mais nous devons garder à l'esprit la nécessité d'accorder la priorité au client. Et lorsque nous mesurons l'efficacité de notre rendement, une partie de cette mesure concerne l'orientation client. Cela explique que j'aie été si préoccupé récemment par la qualité de nos contacts téléphoniques : c'est en effet l'un des éléments les plus importants de l'orientation client.

Les Systèmes d'information fabriquent des produits ; c'est là

la nature de leur mandat. Supposons, par exemple, qu'une personne achète une auto Ford de marque Taurus, mais ignore quelle allure aura le véhicule, quand on lui livrera, où joindre le vendeur et si le produit sera conforme à ses exigences : à mon avis, vous auriez là un client très mécontent! Eh bien, c'est ce genre de situation que l'orientation client nous fait éviter, car elle nous permet de nous voir avec les yeux du client. Notre tâche, donc, est de susciter des attentes légitimes chez le client, de les satisfaire et de nous mettre à sa disposition. Voilà comment les SI exécuteront bien leur travail et seront perçus comme tels.

Q. Pourriez-vous nous dire un mot sur les pourparlers CN-CP, ou nous faire part de votre réflexion à ce sujet?

Les Systèmes d'information ont avant tout pour rôle de livrer leur produit, sans déroger de leur objectif. L'Objectif fiabilité est un bon exemple à cet égard. À mesure que se dérouleront les pourparlers entre le CN et le CP, nous évaluerons leurs effets possibles sur les systèmes. Naturellement, nous apporterons une forte contribution à toute activité commerciale faisant appel à l'informatique.

Q. Que pouvez-vous nous dire au sujet de l'étude sur le service Signalisation et communications? Prévoyez-vous l'intégration de ce groupe à notre fonction?

Depuis longtemps, les télécommunications regroupent de nombreuses équipes. Leurs activités chevauchent celles du service S & C et des Systèmes d'information, et elles touchent également la téléphonie. Toutefois, ces activités tendent actuellement à se fondre dans divers domaines technologiques, ce qui fait que leur spécificité disparaît peu à peu. Autrefois, notre spécialité englobait la photocopie, la télécopie et la téléphonie. Les ordinateurs personnels, les ordinateurs centraux et le bloc signalisation-communications relevaient tous d'unités distinctes. Mais depuis peu, tout change : la société Microsoft s'associe à des câblodistributeurs, les fabricants de logiciels et les compagnies téléphoniques fusionnent et on lance sur le marché de nouvelles architectures, comme le serveur-client, dont les communications sont partie intégrante.

Au cours des cinq à dix prochaines années, la tendance générale sera d'amener d'importantes applications à l'échelle de réseaux répartis. L'achat de services de télécommunications représente une large part des coûts du CN. Nous avons convenu de partager avec l'Exploitation la responsabilité des systèmes téléphoniques et de signalisation, et celle de l'architecture des systèmes d'information. C'est pourquoi nous créerons, au sein des Systèmes d'information, un poste de direction des Télécommunications qui relèvera de moi. Cela se fera bientôt, je l'espère. Le ou la titulaire du poste assumera la planification et la gestion du contrat de l'architecture des communications du CN. Le service S & C conservera la gestion des installations. La mise au point des

logiciels sera beaucoup mieux intégrée aux applications, et elle relèvera des SI.

Tous les chemins de fer procèdent actuellement à un réaménagement de ce genre. Nous serons ainsi en mesure de renforcer le grand pouvoir d'achat du CN en vue de réduire le coût de nos communications.

Q. Voudriez-vous nous donner votre avis sur la restructuration de la fonction formation?

Il y a quelque temps déjà, Louise Piché, Jack McBain et moi-même nous sommes réunis pour parler de formation au CN. Notre pdg tient beaucoup à ce que la Compagnie dispense aux personnes qui en ont besoin la formation nécessaire, au moment voulu. Il veut que nous disposions des moyens nécessaires pour former correctement notre personnel. Louise Piché a donc commandé à des consultants indépendants une étude de nos ressources en formation (Exploitation, Ressources humaines et Systèmes d'information).

Dans le rapport qu'ils ont présenté, les experts ont conseillé de regrouper l'activité formation au CN. C'est pratique courante dans la plupart des chemins de fer et, je dirais même dans la majorité des entreprises, parce que la formation est en soi une activité professionnelle. Nous avons étudié le rapport avec les RH et l'Exploitation, et les deux fonctions ont signifié leur accord à son sujet.

C'est au terme de cette étude qu'a commencé, tant à l'intérieur qu'à l'extérieur de la Compagnie, la recherche d'un ou d'une gestionnaire pour diriger la nouvelle équipe. Comme vous le savez, c'est Stanley Schmidt - jusque-là directeur - Formation - Technologie de l'information - qui a été choisi pour occuper le poste de directeur de l'Éducation pour l'ensemble du réseau. Stan a, par le passé, fait un excellent travail, et je suis certain qu'il se surpassera dans l'exercice de ses nouvelles fonctions.

Nous croyons que la présence de Stanley aux commandes de l'équipe de formation sera favorable aux Systèmes d'information parce qu'il connaît à fond notre domaine. L'unification des équipes de formation renforcera l'action des Systèmes d'information, car elle favorisera l'établissement de priorités. Le personnel de l'Objectif fiabilité, notamment, y gagnera. Ce que nous visons, en somme, c'est l'efficacité de la formation. Nous ne voulions pas tant réduire nos coûts qu'assurer notre efficacité. Et nous croyons que nous y arriverons.

New Director takes on the Telecommunications Challenge

Sameh Fahmy, the new Director of Telecommunications in IS, is a man with a mission. Ready to take on the telecommunications challenge at CN, he brings with him experience, a results-oriented attitude, and a vision for success. In a recent interview, we asked him about his views on his new role and his plans for telecommunications.



Sameh Fahmy, new Director of Telecommunications

Q. Sameh, can you tell us about your background and the experience you bring to CN?

A. I have been in the IS/telecommunications area for the last 21 years. I have worked in various organizations in Canada and the U.S. I began my career with IBM Canada in Montreal as a Systems Engineer directly after completing my Engineering degree. I have spent time in Washington with the AAR and AMTRAK. I joined CN in 1981 in Management Services. From there I worked for Travelers as Associate Director of Host Planning and Performance (Connecticut). I returned to Montreal in '87 with Caisses populaires Desjardins where I spent the last seven years, three as Director of Engineering and four as Director of Telecommunications.

My association with CN is four years as IBM Systems Engineer working on the CN account, then 4 years as a CN employee. My railroad association is 12 years.

Q. You worked in IS for four years prior to leaving CN in 1985. Why did you choose to return and accept the position of Director of Telecommunications?

A. I returned because I like working for CN very much. I like the family environment at CN. I think this is an excellent organization. Fundamentally, I believe CN is an engineering type of organization because of the nature of the business, i.e., railroads. I believe there is a lot of potential at CN and if I focus specifically on the telecommunications area, there is tremendous potential. When I was approached to see if I was interested in this position, I was surprised to hear that \$83M was spent on telecommunications each year. I was also very interested in the fact that telecommunications is a very critical and integral part of the actual running of the business.

There is a lot to do in this area because telecommunications at

Personal Profile

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Education:	MBA, McGill, 1983 BEng, Electrical Engineering, McGill, 1973 CGA (Certified General Accountant), expected completion June '95
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CN is fragmented right now. There is fragmentation between data and voice. Within data, there is fragmentation between telecommunications directly associated with train control and telecommunications that is more of an IS nature. There is even fragmentation between software and hardware telecommunications. This results in tremendous potential for infrastructure improvements and the introduction of new technologies that will both reduce costs and at the same time provide opportunities for Operations and Marketing. There is also opportunity for leverage with vendors due to the sheer size of the business. All of these opportunities are great from the infrastructure side. From a customer service side, there is also potential in bringing in new tools for inventory management, configuration management, and remote diagnostics. These tools can help diagnose problems, improve optimum configurations, and promote full productivity of people while increasing customer satisfaction by allowing us to respond to people much faster.

Back at CN? "I like the family environment at CN. I think this is an excellent organization."

Q. What do you see as your primary goal as Director of Telecommunications for IS?

A. My main goal is to make sure that telecommunications is fully exploited for the benefit of CN. We obviously need the proper mechanics to achieve the objective but I think this is secondary. My approach as a first step is to develop a strategic plan for telecommunications. My target is to finish that by early September. We have already formed a group that has representation from S&C, the Admin. Voice area, IS, and vendors such as Bell. We are also open to any other group that would like to make a contribution. Once we have the telecommunications plan in place, it has to be synchronized with the corporate business plan. That is, knowing and understanding well what CN's business plans are, and then trying to optimize the use of new technologies in telecommunications to respond to these business plans. Once presented, we will put forward a series of action plans to be implemented. We obviously have to find ways of financing these plans through cost reductions in some areas. Vendor discounts and infrastructure changes resulting from consolidations can help finance new technologies to reduce downtime of trains or lead to new facilities. This will provide CN with a competitive edge from a marketing point of view.

I developed strategic plans when I was at Desjardins. We had a plan each year. Actually, we developed the very first telecommunications plan because it was very obvious that that is what was needed. Out of that plan, everything fell into place. To answer your initial question about the mechanics and the organization, all of that will become clear once we have a strategic plan. The strategic plan will be concrete and will be business, technically, and financially oriented. It will cover the transition, and the dollars needed. Instead of spending a lot of time on process which can take forever, I will be more focused on getting the job done, which is really what counts.

Q. What can you tell us about the organization of your group?

A. I will start with the recommendation that was presented to the System Advisory Committee (SAC) on April 22 and proceed with reviewing the organization and work processes in order to deliver the best quality service to our internal and external customers. In brief, we will have a group in telecommunications that will consist of a small planning group called Service Development; another group which is Customer Service-oriented towards PC's and support, instal-

lation and changes in the network, who will report directly to me.

We will also go with matrix reporting for the two Help Desk functions which are the MNS in S&C, and OC in SNO. There is also the matrix function for engineering which is in S&C. We will follow exactly what was agreed upon by all of the groups. We will also transfer budgets that were agreed upon. The voice and data budgets will be grouped with IS budgets. There will still be budgets, particularly in the regions, that will remain with the regions. We will follow-up on the recommendations made by the Committee.

The organization, for the most part, is pretty well settled. There is a total group of 44 people, which includes the Customer Service group (Rejean Daigle's group) previously under Jim Bright; and the Planning group which consists of 3 planners, Doug Paulette, John Meddings, and Marg MacIsaac, also from Jim Bright's group; Joe Hebert from S&C, Jean Roger from Admin, and Carlos Da Roza from Bill Burrington's area dealing with architecture.

I think we will have a very interesting group of customer service people and the core planners who will be the nucleus.

The key thing right now is to improve customer service for LANS by speeding up installations and providing customer service level agreements so that everyone has the same expectations.

Q. Who will you be working in partnership with?

A. S&C and the regions. I want to make sure the strategic plan that I will be preparing covers all the issues that are of importance to everyone. I will run it by them before it is presented. But I will not get hung up on organizations and departments, etc. I expect a lot of help in preparing my plan from other departments.

I am also looking forward to meetings with Gerald Davies and Jack McBain to get a better understanding of their objectives. To target specific customers, you have to know who they are and you have to spoil them. If you have fewer customers, yet

profitable customers, you have to take care of them. How do you provide them with tools that help them do their business?

Q. What do you foresee as your greatest barrier/challenge in creating and implementing a strategic plan for Telecommunications?

A. I honestly do not see any barriers. I created the department of telecommunications at Desjardins out of nothing. It was very fragmented. Really the way to do it is to establish a vision and then follow up on it with competence and results. If you say in 3, 6, 9 months I will be delivering x number of millions of dollars in savings, and that I will be delivering infrastructures that will evolve so that the business will be much better, be it marketing or the actual operation of the railroad, obviously people will give you the chance. They'll say go ahead and do it because the results

are very interesting. If you deliver on the results, then you establish credibility and everything becomes easy, becomes second nature. The department that was set up at Desjardin was highly respected, both internally and externally. It was a very competent, very efficient, and very technically advanced department. It was respected everywhere and that's what I intend to do here.

Q. Do you foresee any problems with the regions?

A. I encountered things before that I am sure were tougher than anything that can happen in the regions. Desjardins is a cooperative. There were 11 regional federations in Quebec, 1 in Ontario, 1 in Manitoba, and 1 in N.B., totalling 14. The Head Office had absolutely no authority because it's a cooperative. The federations were actually sitting on the Board of Directors. The Caisses were completely autonomous entities. The way to work in an

environment like that is again by competence, by credibility, by coming up with concrete things instead of wasting time saying this should be my job, this should be your job etc... The easiest way is to take the lead and deliver results. People will accept working with you if you help them. In CN it should be

The Plan: "Instead of spending a lot of time on process, which can take forever, I will be more focused on getting the job done which is really what counts."

The Focus: "The key thing right now is to improve customer service for LANS by speeding up installations and providing customer service level agreements so that everyone is in agreement with expectations."

Director

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an even easier environment because it is not a cooperative.

Q. Do you have an outline for your strategic plan?

I think it is very important to keep things moving. A lot of people have been working on the Telecommunications Committee for a long time. Now there is a Director of Telecommunications. If we drag our feet and wait until Christmas to come up with concrete plans, I think the momentum will be lost. I think we have good momentum now and I think if we are to keep it going, we will have to finish by September.

A. I know the outline of the strategy plan which is pretty well standard. You begin with objectives and some of the objectives are operational too. For example, maintain and improve the availability of the network, improve performance response time, respond to business needs, and reduce costs. All of these are standard objectives in any telecommunications plan. We may be more specific in tailoring it to some specific CN objectives, e.g. provide SRS support. Next, we have to view the present situation - its strengths and weaknesses. There are two sections to that, the infrastructure and the Help Desk/Customer Service functions. We will look at new elements from business and from technology that will affect the current situation, establish a target and transition plans. The last area is dollars, i.e. what investment we need, what returns, etc.

The one thing again that is fascinating with CN is that whatever result you come up with has an absolute direct impact on the business. If the trains stop everything stops. There is no limit in technology at CN because there is a lot of concreteness. When you are in financial institutions, whether it is banking or insurance, you are dealing with paper factors, you debit/credit accounts. It's the same with insurance policies. In CN it is all concrete - locomotives, cars, rails, etc. It seems to me you have to labour

quite a bit to make money. It's a lot of work, but then again this is another reason why CN is so interesting.

Q. Have you seen any changes in CN since you were last with the company in the early eighties.

A. Yes, drastic changes. It has become a very dynamic environment. It is obvious that the president is very business-oriented. People have little patience. They want things done yesterday which is very refreshing. I enjoy working in an environment that makes things happen fast. I know Ronan is a very dynamic person and results-oriented. I also noticed that people in his department like working for him. He was the one that sold me on the job and I really wanted to work for him. The team in IS is a tremendous team. The directors are a very strong and complementary team. You don't see those silos, which makes it so easy to work together. It has definitely changed a lot.

Barriers: *"The easiest way is to take the lead and deliver results. People will accept working with you if you help them."*

Change: *"They (people) want things done yesterday which is very refreshing. I enjoy working in an environment that values things that happen fast...He (Ronan) was the one that sold me on this job and I really wanted to work for him."*

SRS: *"The SRS project is very impressive. Having that kind of vision and getting that kind of money in a time of downsizing is tremendous."*

The SRS project is very impressive. It is an investment in the future. Having that kind of vision and getting that kind of money in a time of downsizing is tremendous. I checked with vendors about what was going on in CN and they said it has changed a lot. It is much more business-oriented today than it ever was. It used to be just cost-oriented when I left. It is good to try to save money, but it is also important to look at the advantages that investments in technology bring to the business, increasing market share, reducing railroad costs, etc...

The other thing about CN is that it is a much lighter organization. Anything lighter flies higher.

I am really looking forward to all of these things. The bigger the challenge, the higher the satisfaction. I am really looking forward to the challenge here at CN.

Tête-à-tête with our VP

In an interview with our VP, Mr. Ronan McGrath gives us an update on the IBM Consortium Review, which was recently conducted, in IS.

Q. Ronan, can you give us an update on the IBM Consortium Review recently conducted for IS?

A. Let me explain what the IBM Consortium Review is all about. Twenty-six companies from all parts of the globe are invited by IBM annually to take part in this review. This year such companies as Union Pacific and Toyota have been asked to participate. IBM reviews each participating company's IS activities in terms of best practices. This is basically the Olympic Games of the industry. It is the toughest possible benchmark.

The reason we are doing this is because I want us to understand what it takes to be world-class, to be a centre of excellence, to be the best possible IS function. Given the fact that there is so much going on and so many things happening, I think it is important that we ensure that the direction we are taking is appropriate for the corporation, and that we are doing all the right things. Because, with all of the hard work that is going on, it's important that the direction we are taking is strategically appropriate.

The process is a demanding one and the benchmarking is very high. Therefore, I am under no illusions that the first time we do this we are going to come out as the best IS department in the world. Getting invited indicates that we have a significant level of competence. The issue is not "are we good?", the

issue is "how can we be superb?" and "what does it take to get there?"

The benchmarking really looks at what the company's business strategy is and tries to see how well Information Technology is aligned to the corporate strategy and to the corporate culture; to see if we are delivering the things that we are supposed to; to see that we are appropriately lined up with our customers; and to determine whether IS is delivering the kind of value it should to the corporation. In doing this they(IBM) interviewed a lot of people in Information Systems, as well as a lot of people outside of IS, including Jack McBain and Gerald Davies.

We have a raw report which we are simply nailing down right now in terms of factuality. We will be sending out specific communiques on the contents of the report as soon as we have it finalized. But briefly, they(IBM) believe that we have made enormous progress but that we have more to do to become world-class. We will define what those things are that we need to do first, and the decisions will be based on what will provide the greatest value to the company. What we don't know, of course, is how well we benchmark against the other companies, since the benchmark is an on going process. Somewhere around the later part of October, all of the benchmarks will be

completed. All of the participating corporations CIOs or VPs of Information Systems meet together in a single location for a number of days, at which point we get to compare our report cards and are ranked one to twenty-six in every category.

It's clearly a demanding process; the objective is to make sure that we are the very best that we can be. I fully recognize that Information Systems is under tremendous pressure and is producing enormous value right now. But part of our effectiveness over time is going to be the quality of our forward planning. How we get ourselves to be as pro-active as we can be. It is clear that this is a process of continuous improvement.

No company is world-class in all activities. There is no case of one company being at the top/bottom of the list in all activities. Where we come out has yet to be determined. What we do about it, of course, will be the subject of intense discussion internally. What I will be doing, however, is preparing a summary of this as soon as it is finalized. We have had a meeting with IBM already on it (report) as there were some issues that required clarification. When we do have a final copy of the report, it will be distributed, and we will ensure that everyone in IS has access to the report.



"The reason we are doing this (benchmarking) is because I want us to understand what it takes to be world-class, to be a centre of excellence, to be the best possible IS function. "

“As this world shrinks together like an aging orange and all peoples in all cultures move closer together (however reluctantly and suspiciously) it may be that the crucial sentence for our remaining years on earth may be very simply: TRANSLATE OR DIE. The lives of every creature on earth may one day depend on the instant and accurate translation of one word.”

Edward Gentzler

